

falls throughout the storm and illustrate the distribution of the accompanying rainfall :

STATIONS.	RAINFALL OF 24 HOURS PRECEDING 8 A.M. OF					Total Rainfall of Period.
	June 9th.	June 10th.	June 11th.	June 12th.	June 13th.	
Akyab	2.88	6.05	11.02	4.53	5.60	30.08
Calcutta	0.88	...	0.05	0.05	0.07	1.05
Jessore	1.42	0.16	2.14	0.38	1.25	5.35
Dacca	0.02	3.01	1.38	0.92	1.27	6.60
Burdwan	0.02	0.04	0.02	1.36	0.42	1.86
Berhampore . . . . .	...	0.04	0.15	2.09	0.09	2.37
Dhubri	0.05	0.14	0.07	0.89	1.35	2.50

(3) *Land-formed depression of June 16th to 20th.*—After the dispersion of the previous storm, strong south-westerly winds blew across the Bengal Coast, and weather was squally in Bengal. Slight indications were shown on the 15th and 16th of a tendency towards the formation of a depression in East Bengal, and on the 17th there was a small but well marked depression and cyclonic circulation, the centre of which was between Calcutta and Dacca. It marched westwards, and was south of Hazaribagh on the 18th and in Central India, between Sutna and Saugor, on the 19th. Heavy rain fell over the Central Provinces and Berars at this time. The depression at the centre was a sixth of an inch. It began to fill up on the 20th, on which day the storm was advancing between Saugor and Jhansi into Rajputana. It merged into the area of permanent depression in Rajputana and Sind on the evening of the 20th. This storm gave a moderately heavy burst of rain to the whole of Bengal, Behar, Chutia Nagpur, Orissa, the Central Provinces, and Central India.

(4) *Depression and small cyclonic storm of June 24th to 30th.*—The first indications of the formation of this storm were shown on the morning of the 24th. It originated in the north-west angle of the Bay. The centre was between False Point and Saugor Island on the morning of the 26th, and the depression at the centre probably exceeded two-tenths of an inch. It advanced westwards across the North Orissa Coast in the afternoon and passed between Sambulpur and Hazaribagh on the 27th. It was in Central India (probably between Saugor and Jhansi) on the morning of the 28th. Heavy rain was received at this time in the northern and western districts of the Central Provinces and Berars. The storm continued to advance to the west-north-west and was a little to the south of Jeypore on the morning of the 29th, at which time the depression was an eighth of an inch. It merged into the area of permanent low pressure in Upper India on the 30th. It gave general rain to the whole of Bengal, Orissa, Behar, Chutia Nagpur, the Central Provinces, Berars, Central India, and South-East Rajputana.

Pressure.—The chief barometric movements during the month occurred in connection with the cyclonic storms described above. Although they were large in amount, the mean pressure of the month for the whole of India was almost identical with the normal mean—being only .005" in excess. The following table gives the pressure anomalies or the variations of the mean pressure freed from the general variation (.005") for each of the larger Provinces and the corresponding anomalies of May for comparison :

Province.	BAROMETRIC ANOMALIES OR PRESSURE VARIATIONS.	
	Month of May.	Month of June.
Burmah	—'002	+ '011
Bengal	—'019	+ '008
Assam	—'024	+ '019
Behar and Chutia Nagpur	—'027	+ '006
North-West Provinces	—'009	+ '003
Punjab	+ '024	—'016
Sind and Rajputana	+ '014	—'013
Central India	+ '015	—'001
Central Provinces	+ '006	—'004
Bombay	—'006	—'001
Madras	—'004	—'002

Hence, as frequently happens, the first effect of the establishment of the south-west monsoon in 1889 has been not only to diminish the amounts of the barometric anomalies but also to reverse their character over the greater part of India. The abnormals over the whole of North-East India for the month of June were positive and over the whole of Western and North-Western India they were negative, and were in all cases, except Bombay and Madras, opposite in character to those of the preceding month. They were, however, small in amount for all stations, except the following :

Dera Ismail Khan	—'030 inch.
Mooltan	—'028 „
Jacobabad	—'027 „
Sibsagar	+ '028 „

whence approximately normal average pressure conditions obtained during the month, and the abnormals indicate the continuance of steady and strong south-west monsoon currents, more especially from the Arabian Sea.

Storms.—The large cyclonic storms of the month have been described above. The following local storms were reported during the month :—A tornado at Mymensingh on the morning of the 4th June, which caused some loss of life and property ; severe duststorms at Nagpur and Hoshangabad on the afternoon of the 5th, and violent duststorms on the 9th at Allahabad, Sutna, and Lucknow in the North-West Provinces, and at Krishnagarh in Bengal. No severe local storms have been reported since the 10th, by which date humid monsoon winds extended over nearly the whole of the country.

Temperature.—The temperature conditions of the month were mainly determined by the rainfall distribution. At the commencement of the month temperature was excessive over the whole of India. The greatest excess of temperature at this time occurred in the area defined by the stations of Ajmere, Agra, Jhansi, Delhi, Jubbulpore, Saugor, and Hoshangabad. The 2nd was a

particularly hot day. The following gives the temperature variations of that day for these stations :

Stations.	Variation of Maximum temperature from normal of day.	Variation of Minimum temperature from normal of day.	Variation of Mean temperature from normal of day.
Ajmere	+ 10·1	+ 10·3	+ 10·2
Agra	+ 10·5	+ 10·7	+ 10·6
Jhansi	+ 10·2	+ 11·3	+ 10·8
Delhi	+ 11·1	+ 11·6	+ 11·4
Jubbulpore	+ 11·6	+ 9·9	+ 10·8
Saugor	+ 10·4	+ 9·3	+ 9·9
Hoshangabad	+ 10·2	+ 5·3	+ 7·8

With the advance of the monsoon currents up the Arabian Sea and Bay of Bengal temperature diminished generally, and the area of greatest excess of temperature was transferred northwards to the Punjab.

The following gives the highest temperatures at stations in the Punjab on the 8th, which was one of the hottest days of the month in the Punjab :

Stations.	Variation of maximum temperature from normal of day.	Variation of Minimum temperature from normal of day.	Variation of Mean temperature from normal of day.
Sirsa	+ 2·7	+ 10·4	+ 6·6
Delhi	+ 7·9	+ 13·0	+ 10·5
Ludhiana	+ 10·2	+ 9·6	+ 9·9
Lahore	+ 10·2	+ 5·9	+ 8·1
Sialkot	+ 11·1	+ 9·4	+ 10·3
Rawalpindi	+ 12·2	+ 4·9	+ 8·6
Peshawar	+ 11·0	+ 5·3	+ 8·2

A rapid advance of humid monsoon winds commenced on the 9th and increased humidity and diminished temperature very rapidly over the whole country. The reduction of temperature was mainly due to the rapid spread of cloud over Upper India and the occurrence of general rain in all districts, except Sind, the West Punjab, and West Rajputana.

The following table, which gives the temperature variations at several stations in Upper India on the 10th, furnishes remarkable examples of the very large reduction of temperature effected by rainfall at the commencement of the south-west monsoon :

Stations.	Variation of Maximum temperature from normal of day.	Variation of Minimum temperature from normal of day.	Variation of Mean temperature from normal of day.
Sambhar	—11'4	—13'0	—12'2
Jeypore	—11'7	—12'9	—12'3
Bareilly	—14'6	— 7'3	—11'0
Meerut	—18'2	— 8'7	—13'5
Roorkee	—20'1	— 7'6	—13'9
Delhi	—16'2	— 7'6	—11'9
Ludhiana	—23'5	— 5'0	—14'3
Sirsa	—30'3	—12'9	—21'6
Lahore	—13'5	— 6'8	—10'2
Sialkot	—15'1	— 5'7	—10'4

During the remainder of the month the variations of temperature in Upper and Central India depended almost entirely upon the occurrence or non-occurrence of continued rainfall. They were similar in character to those just described, but much smaller in amount. The following give a summary of the temperature data for the month, and shows the general character of the variation of temperature from week to week in different parts of the Empire :

Meteorological Area.	VARIATION OF MEAN TEMPERATURE FROM NORMAL FOR THE WEEK ENDING					Variation of Mean temperature of month from normal.
	June 3rd.	June 10th.	June 17th.	June 24th.	June 31st.	
Burmah	+ 3'6	+ 3'4	+ 0'1	+ 0'7	0	+ 1'4
Bengal	+ 3'3	+ 1'0	— 1'3	— 0'2	— 1'3	+ 0'4
North-Western Provinces	+ 2'8	+ 3'9	— 6'8	— 3'0	— 2'5	— 1'2
Punjab	+ 2'0	+ 5'1	— 3'7	+ 4'0	+ 0'6	+ 2'2
Sind and Rajputana	+ 3'7	+ 3'9	— 2'3	+ 0'2	— 1'4	+ 0'7
Guzerat and Central India	+ 5'0	+ 3'1	— 3'3	— 2'0	— 1'1	+ 0'1
Berar and Central Provinces	+ 4'0	+ 4'4	— 2'0	— 4'5	+ 0'5	+ 0'7
Bombay	+ 2'0	— 0'3	+ 0'2	+ 0'2	— 0'3	+ 0'2
Madras	+ 1'2	+ 1'2	+ 0'5	+ 0'7	— 0'1	+ 0'9

Rain.—The south-west monsoon current advanced along the West Coast as far as Broach in the first week of the month and gave very heavy rain to the West Coast districts. It began to extend into the interior after the breaking up of the cyclonic storm in the Arabian Sea on the 9th and blew very steadily throughout the remainder of the month.

The Bay of Bengal current was not so strong as the Bombay current. A small diffused storm formed in the Bay during the first week of the month and

drifted very slowly northwards. It crossed the Orissa Coast on the 11th and began to give general rain to Bengal from the 10th. The unusual strength of the Bombay monsoon current at this time was shown by its rapid extension across Central India into the North-West Provinces and East Punjab on the 9th and 10th. General rain over nearly the whole of Northern India due to the advance of both currents hence dates from the 10th June. The distribution of rainfall during the remainder of the month was largely determined by the course of the three small cyclonic storms described above.

Two of the three small cyclonic storms of the month advanced in a general westerly direction across the head of the Peninsula. The indraught to them from the Bay of Bengal gave general and nearly continuous rain during the latter half of the month to Bengal, Behar, the North-Western Provinces, and Central India. The strong indraught to the same storms during the latter part of their existence from the Arabian Sea gave heavy rain to the Central Provinces, the Bombay Coast districts, and North Deccan.

In consequence of these conditions, the Punjab received slightly less than its normal amount, whilst the strong westerly or west-south-westerly deflection of the Bombay current, determined by the advance of the last two cyclonic storms, caused the rainfall of Khandeish, Guzerat, and Kathiawar and part of Berar to be considerably below the average. The deficiency in these districts varies within wide limits and averages forty-five per cent. There was also a slight deficiency in Hyderabad and Mysore and a moderately large deficiency in the Carnatic, due chiefly to the more rapid advance than usual of the monsoon currents and their early establishment over Northern India.

In all other districts the rainfall of the month was more or less above the average and was in some districts excessive. Assam received an average of 12 inches more than its normal amount; Malabar, 11 inches; Behar, Orissa, the Circars, and Lower Burmah, $6\frac{1}{2}$ inches; the Konkan, $5\frac{1}{2}$ inches; Lower Bengal and the greater part of the North-Western Provinces (*i.e.*, to the north of the Ganges), $3\frac{1}{2}$ inches, and North Bengal, Rajputana, and Central India, 2 inches in excess.

One very noticeable feature of the present monsoon has been the favourable rainfall in certain districts, including Ganjam, North Behar, the Central Provinces, Khandeish, and Guzerat, where it was more or less deficient during the whole of last season. Thus Ganjam, North Behar, and the Central Provinces received normal or abundant rainfall during the month of June. The rainfall of June was, on the other hand, very much below the average in Khandeish and Guzerat, but heavy rain has fallen during the present month (July) in these districts also.

The large rainfall of the month was mainly due to the earlier advance of the south-west monsoon into the interior of the country and the prevalence of strongly marked monsoon conditions during the last three weeks of the month.

The following example of heavy rainfall during this month appears to deserve record:—Kumpta in North Kanara received 39 inches during the week ending 10th June, and the average fall of the whole district for the same period was 34 inches. Very heavy rain was received in Burmah during the following week, when Akyab received 36 inches, Sandoway 31 inches, Tavoy 26 inches, and Bassein 19 inches. As a rule very heavy rainfalls have been quite the exception, which is in accordance with the general rule that a strong monsoon gives well distributed and continuous moderate to heavy rain, and a weak monsoon tends to give excessive local falls and very irregularly distributed rain.

The following table gives complete data and shows the actual average rainfall and the normal rainfall of the month of the twenty-one districts into which

the country is divided, so far as it is indicated by the telegraphic reports of a few stations in each district :

Districts.	Number of Stations.	Normal Average Rainfall in June.	Actual Average Rainfall in June, 1889.	Difference from the Average in June, 1889.
Punjab, West	7	1'60	0'91	— 0'69
„ East	4	3'83	3'34	— 0'49
North-Western Provinces, Trans-Gangetic	7	5'40	9'00	+ 3'60
„ „ Cis-Gangetic	3	3'88	3'52	— 0'36
Behar	2	6'66	13'17	+ 6'51
North Bengal	3	15'27	17'14	+ 1'87
Assam—Cachar	3	20'03	32'02	+ 11'99
Lower Bengal and Chutia Nagpur	8	11'17	14'77	+ 3'60
Orissa—North Circars	5	6'39	12'94	+ 6'55
Central Provinces, South	7	9'72	8'94	— 0'78
Berar—Khandeish	2	6'77	4'70	— 2'07
Rajputana, Central India, Saugor, and Nerbudda	9	4'33	6'39	+ 2'06
Sind—Cutch	3	0'09	0'18	+ 0'09
Guzerat	3	4'96	3'26	— 1'70
Konkan	4	21'56	27'24	+ 5'68
Deccan—Hyderabad	5	5'12	4'90	— 0'22
Malabar	5	33'40	44'56	+ 11'16
Mysore—Bellary	4	2'80	2'42	— 0'38
Carnatic	6	2'03	0'52	— 1'51
Lower Burmah	7	23'32	29'71	+ 6'39
Ceylon	1	8'03	3'12	— 4'91

SIMLA 18th July, 1889.

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GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

**Weather Review of India for the week ending at 8 a.m. on
Monday, July 22nd, 1889.**

The principal feature in the weather of this week has been the storm, the commencement of which was noticed in the last Summary, which was formed over the Bay and after a period of little or no movement off the Orissa Coast subsequently travelled north-north-westward into Behar. This storm was at no time very deep, the greatest barometric variations from the normal being $-241''$ at False Point on the morning of the 19th, and $-238''$ at Saugor Island on the morning of the 20th. Owing, however, to a brisk barometric rise which occurred to the south of the storm, just before the centre crossed the Coast, the gradients on the southern quadrants were steep, and strong winds and gales were experienced over the Bay and at the Sandheads. The storm filled up quickly as soon as the centre passed inland, but not without giving very unsettled weather and heavy rain to parts of Bengal and the North-Western Provinces. In those parts of the country unaffected by the storm normal monsoon weather prevailed, though on the North Konkan Coast, accompanying local pressure irregularities, the current was largely above its normal monsoon strength.

The chart of the 16th showed the ordinary high pressure area in the extreme south and low pressure area over the Punjab. Imposed on this distribution there was a well-defined storm area overlying the north-west of the Bay, Orissa, the Circars, and the east of the Central Provinces. The centre, or centres (for this part of the storm was probably less clearly defined than would appear from the chart) of the disturbance lay off the Orissa Coast, the lowest barometer being $29.388''$ at False Point. The wind circulated cyclonically around the storm area, though without much force, but in other parts of India the normal monsoon directions prevailed. On the 17th the storm occupied approximately the same position, but the barometer had fallen briskly in its neighbourhood, and the lowest reading reported was $29.329''$ at False Point. On the North Konkan Coast the wind had "backed" to south-south-east and increased in force apparently in connection with some small local irregularity lying off that Coast. Elsewhere there was no important change. On the 18th the barometer was rising over the head of the Bay, and the storm had lost in definition, while the lowest reading was $29.356''$ at False Point. The winds were still very variable about the North Konkan and Kattiawar, the direction at Rajkot being north-north-west, at Surat south-east, and at Bombay west. At the last station the force had again risen. The chart of the 19th showed that pressure had increased briskly over the Peninsula, but had decreased over the whole of Northern India, including the head of the Bay. The storm over the Bay had again developed, and the lowest pressures were shown over the north-west angle of the Bay, apparently midway between the stations of False Point, Saugor Island, and Balasore. There was still very little strength in the wind even close to the storm centre. On the West Coast the direction of the wind had become normal throughout, but the force had risen and a strong breeze was blowing at Bombay. Early in the morning of the 20th the storm crossed the Bengal Coast between

Balasore and Saugor Island, travelling on a north-north-west course. The lowest barometer reading reported was 29'300" at Saugor Island. Squally and rather strong cyclonic winds prevailed over Lower Bengal and gales over the Bay. On the West Coast the winds remained westerly, but a slight gale was blowing at Bombay. By 8 A.M. on the 21st the storm had reached the neighbourhood of Benares. The barometer was rising, except in the immediate vicinity of the storm centre, and the storm was apparently filling up. Normal monsoon conditions prevailed over the greater part of India, and the force of the wind at Bombay had fallen. On the 22nd the chart showed that the storm had still further filled up without moving its position and that elsewhere normal conditions continued.

Temperature.—Variations from the mean have been rather large—more especially in the Punjab and Bombay, where there was a decided excess of heat about the beginning and a deficiency about the close of the week. In Burma, Bengal, the North-Western Provinces, Sind, and Rajputana the weather throughout the whole week was warmer than usual; but in the Punjab, Bombay, the Central Provinces, Central India, and Guzerat the mean temperature at the close of the week fell below the normal. In the Punjab the mean excess was 5'4° on the 16th and the mean defect 3'6° on the 20th, giving a range of 9° for the week. In Madras, with the exception of a trifling excess on the 19th, the average mean temperature was low throughout. Rather high maxima have been experienced over the Punjab and Sind, more particularly during the earlier days of the week. The highest reading recorded was 114'2° on the 19th at Jacobabad.

The following table shows the excess or defect of the mean average temperatures of the different Provinces for the present and for the preceding week :

PROVINCES.	Difference of Mean Temperature of Last Week from Normal.	Difference of Mean Temperature of Present Week from Normal.
Burmah	+ 2'9°	+ 1'6°
Bengal	+ 1'5°	+ 2'1°
North-Western Provinces	— 0'2°	+ 1'8°
Punjab	— 3'6°	+ 0'7°
Bombay	+ 0'1°	— 0'1°
Central Provinces and Berar	+ 2'1°	+ 1'5°
Guzerat and Central India	+ 0'6°	+ 2'3°
Sind and Rajputana	+ 1'7°	+ 3'4°
Madras	— 0'4°	— 0'6°

From this table it will be seen that the weather over Northern and North-Western India, including Guzerat and Central India, has, relatively to the average, been warmer than during the previous week, and that elsewhere there has been very little change.

Rain.—The principal features of the rainfall of the past week are the steady, constant rainfall over the Peninsula, the Central parts of the country, Burma, and Lower Bengal; the heavy local rain in Behar and the east of the North-Western Provinces in connection with the breaking up of the storm; and the slight, local, and scattered rainfall in Upper India.

The following is a brief description of the daily distribution of rain :—On the 16th rain was general over the Peninsula, the Central parts of the country,

Orissa, East Bengal, and Burma, but over the whole of Northern India from Behar to the Indus the only rainfall was a few local showers. The heaviest rain was on the West Coast. The rain reported on the 17th was distributed in the same manner as that on the 16th, except that there was a little more over Northern India. On the 18th the only difference was the increasing heaviness of the showers in some parts of Northern India. The chart of the 19th still showed the same distribution, but on the 20th, when the storm crossed the Coast, rain became more general over Northern India, and on the 21st and 22nd there was a heavy burst of rain over Bengal and the North-Western Provinces. The Punjab has been visited by showers only throughout the week.

The table at the close of this Summary shows that at twenty-two out of the fifty-two divisions there has been an excess of rain during the week and that at twenty-eight there has been a deficiency. The excess has been most marked over Guzerat and Kattiawar, but has been fairly large over the greater part of the Peninsula, in the central districts, and in Orissa and Tenasserim. The deficiency has been greatest over Upper India.

Tenasserim, as mentioned above, has a considerable excess, but all the other divisions of Burma and all divisions in Bengal and Assam, except the Surma and Orissa divisions, have had less rain than the normal. Oudh had a slight excess of rain, but the North-Western Provinces and the whole of the Punjab exhibit a deficiency. The greatest defect is in the hill districts. The Peninsula, Malabar and Mysore show slightly deficient rains, but all the other western districts, *viz.*, Madras (South Central), Coorg, the Konkan, the Bombay Deccan, Khandeish, Guzerat, and Kattiawar received excessive rains. The Central Provinces and Berar shared in this excess, but in Central India and Rajputana the amount of rain varied considerably. On the East Coast also the variations were irregular and small, some divisions reporting a slight excess, while neighbouring divisions reported a deficiency.

The maxima in Burma were in general moderate, but Tavoy received 23 inches and one station in Amherst $21\frac{3}{4}$ inches within the week. Cherrapunji received $14\frac{3}{4}$ inches and Kurseong $14\frac{3}{4}$ inches, these being the largest amounts in Bengal and Assam. In the North-Western Provinces the maximum falls varied considerably. They were generally small in the plains districts and rather large in the submontane district. In the Punjab there were no falls of any importance.

On the West Coast several large falls occurred. One station in Calicut recorded $21\frac{1}{2}$ inches, one in Ratnagiri 25 inches, and one in Colaba 20 inches. In the Bombay Deccan the station of Banda in the Kolhapur district received 33 inches. Large amounts were also reported from several central stations and from Guzerat. In Madras the amounts were everywhere small.

The concluding column of the table shows, that the seasonal rains have been deficient over Burma and Eastern Bengal, that from Central Bengal westward as far as Oudh there has been an excess, and that from Oudh westward to the Indus the amount of rain received relatively to the average is very variable. Most of the Peninsula districts, except Mysore, are about or over the average. The Central Provinces show very little departure from the normal, and Guzerat and Kattiawar show an excess.

PROVINCE.	DIVISION.	RAINFALL DATA FOR WEEK ENDING JULY 22ND, 1889.			RAINFALL DATA FROM MAY 13TH TO JULY 22ND, 1889.		
		Average Actual Rainfall of Division.	Average Nor- mal Rainfall of Division.	Excess or Defect, in Inches.	Average Actual Rainfall of Season to date.	Average Nor- mal Rainfall, May 13th to July 22nd.	Excess or De- fect of (Season- al) Rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	Per cent.
BURMAH	Tenasserim	20'27	11'70	+ 8'57	82'27	85'73	- 4
	Lower Burmah	3'69	5'30	- 1'61	31'66	42'53	- 26
	Central Burmah	2'97	3'86	- 0'89	23'05	33'72	- 32
	Upper Burmah	1'28	?	?	21'68	?	?
	Arakan	9'45	10'88	- 1'43	80'49	97'47	- 17
BENGAL AND ASSAM	Eastern Bengal	2'57	3'96	- 1'39	32'10	38'00	- 16
	Assam (Surma)	4'93	4'32	+ 0'61	59'16	47'90	+ 24
	Do. (Brahmaputra)	2'66	3'53	- 0'87	40'28	42'73	- 6
	Deltaic Bengal	2'16	2'45	- 0'29	21'83	21'85	0
	Central Bengal	1'87	2'42	- 0'55	25'03	21'36	+ 17
	North Bengal	3'17	4'30	- 1'13	48'90	45'95	+ 7
	Orissa	5'67	2'73	+ 2'94	20'51	19'83	+ 3
	Chota Nagpur	2'48	3'00	- 0'52	20'42	18'36	+ 11
	Behar (South)	0'83	2'31	- 1'48	16'27	14'77	+ 10
	Do. (North)	1'30	2'42	- 1'12	21'84	18'71	+ 17
NORTH - WESTERN PROVINCES AND OUDH.	North - Western Provinces (East).	1'82	2'35	- 0'53	15'42	12'62	+ 22
	Oudh (South)	3'13	2'25	+ 0'88	16'34	12'55	+ 30
	Do. (North)	2'48	2'24	+ 0'24	14'03	14'93	- 2
	North - Western Provinces (Central).	2'04	2'24	- 0'20	11'44	10'01	+ 14
	North - Western Provinces (West).	1'08	2'44	- 1'36	8'85	10'10	- 12
	North - Western Provinces (Submontane).	1'76	2'86	- 1'10	19'32	16'15	+ 20
PUNJAB	Punjab (South)	0'81	1'14	- 0'33	5'82	5'65	+ 3
	Do. (Central)	1'53	1'70	- 0'17	7'29	9'43	- 23
	Do. (Submontane)	1'61	1'91	- 0'30	10'02	10'38	- 3
	Do. (Hill Districts)	1'77	6'87	- 5'10	30'23	31'56	- 4
	Do. (North-West)	0'95	1'61	- 0'66	7'79	7'33	+ 6
	Do. (West)	0'45	0'57	- 0'12	3'25	2'83	+ 15
BOMBAY AND MALA- BAR COAST DIS- TRICTS (MADRAS).	Malabar	5'28	6'22	- 0'94	60'95	65'14	- 6
	Madras (South Central)	2'50	0'73	+ 1'77	13'14	6'61	+ 99
	Coorg	11'25	8'40	+ 2'85	48'85	44'68	+ 9
	Mysore	0'12	0'75	- 0'63	5'13	8'52	- 40
	Konkan	15'53	8'34	+ 7'19	79'30	54'75	+ 45
	Bombay Deccan	3'38	2'49	+ 0'89	12'59	13'74	- 8
	Hyderabad (North)	...	...	...	...	...	...
	Khandeish	3'31	1'16	+ 2'15	8'44	10'37	- 19
CENTRAL PROVINCES AND BERAR.	Berar	5'37	2'22	+ 3'15	16'05	14'66	+ 9
	Central Provinces (West)	5'04	2'94	+ 2'10	16'97	17'06	- 1
	Ditto (Central)	5'14	4'28	+ 0'86	21'77	21'74	0
	Ditto (East)	5'42	4'64	+ 0'78	20'53	21'96	- 7
BOMBAY (NORTH)	Guzerat	6'26	2'89	+ 3'37	20'48	16'63	+ 23
	Kattiawar	6'18	2'22	+ 3'96	19'31	12'81	+ 51
	Sind	0'01	0'77	- 0'76	0'72	1'52	- 53
RAJPUTANA AND CEN- TRAL INDIA.	Central India (East)	2'93	3'10	- 0'17	14'47	14'41	0
	Rajputana (East), Central India (West).	2'57	2'24	+ 0'33	11'65	9'89	+ 18
	Rajputana (West)	0'24	1'16	- 0'92	4'10	4'46	- 8
MADRAS	East Coast (North)	2'46	1'55	+ 0'91	13'84	11'33	+ 22
	East Coast (North) (a)	5'60	5'51	+ 0'09	9'14	9'45	- 3
	Hyderabad (South)	1'92	1'33	+ 0'59	8'06	8'70	- 7
	Madras (Central)	0'53	0'86	- 0'31	7'82	6'40	+ 22
	East Coast (Central)	1'08	0'82	+ 0'26	7'58	6'81	+ 11
	Ditto (South)	0'05	0'59	- 0'54	5'16	5'01	+ 3
	Madras (South)	0'16	0'12	+ 0'04	2'32	3'00	- 23

W. L. DALLAS,

SIMLA, 25th July, 1889.

Assistant Meteorological Reporter to the
Government of India.

E. C. BUCK,

Secretary to the Government of India.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

Weekly Report on the State of the Season and Prospects of the Crops.

Madras.—*For week ending 20th July.*—Rainfall general; good in most districts, slight in South Arcot, Trichinopoly, Madura, Coimbatore, and Salem. Agricultural operations retarded in Chicacole in Ganjam by excessive rain. Crops generally good, but withering in parts of Salem and Coimbatore; suffering from want of rain in parts of North Arcot, Trichinopoly, and Tinnevely; damaged by excessive moisture in parts of Vizagapatam; affected by insects or disease in parts of Ganjam, Bellary, Coimbatore, and South Canara. Water-supply insufficient in Chingleput and Salem. Stock suffering badly from rinderpest in Anantapur. Prices rising in ten districts, falling in six, and stationary in others. Cholera abating in the three northern districts, but still bad in Ganjam and Vizagapatam. Labourers employed on last day of week,—Gopalpur Canal, 1,473; Ghat Roads, 530; drinking-water tanks and wells, 3,369; minor irrigation and other works, 1,850. Number on Rushikulya and some roads not reported. Number on village relief during week ending 13th July, 49,431; fed in kitchens, 9,034. Imports during week by sea and land, 380 tons. General prospects favourable and greatly improved in Ganjam.

Bombay.—*For week ending 24th July.*—Rain general and sufficient, except in two talukas of Khandesh, where the crops are consequently unhealthy, and in parts of Nasik and Belgaum, where sowing is retarded. Rain deficient also in parts of Dharwar. In two talukas of Surat sowing is retarded owing to incessant rain. Young *bajri* crop doing well in Ahmedabad district, except in taluka Sanand, where it is slightly damaged by caterpillars; young crops also damaged by caterpillars in four talukas of Kaira. Transplantation progressing in Surat, Thana, Ratnagiri, Kanara, Shikarpur, and Baroda; commenced in two talukas of Ahmedabad, and nearly completed in Colaba. Fodder scarce in parts of Nasik, Ahmednagar, Dharwar, and Karachi. Water scarce in parts of Dharwar. Prices rising in one taluka of Nasik.

Bengal.—*For week ending 23rd July.*—The break in the rains lasted in many districts up to the middle of the week, but since the 20th, ordinary monsoon weather has set in and the rainfall has become general. The rain has been very beneficial to the transplanting of the winter rice seedlings now in progress. All over the Province early rice, jute, and sugarcane are doing well. In Rungpore, Bogra, and Pubna some early rice and jute have been destroyed by excessive rain and floods. In Behar the prospects of the *bhadoi* crops are promising. Indigo manufacture everywhere proceeding well. Prices of rice steady and high throughout the Province. Of the affected districts, in the Patna division Chumparun and Motihari report 11 seers per rupee, Durbhanga and Madhoobani 10 seers, and Muzaffarpur and Sitamarhi $7\frac{1}{2}$ to $10\frac{1}{2}$ seers. In Durbhanga the average attendance on relief works has been 5,673 during the week.

North-Western Provinces and Oudh.—*For week ending 24th July.*—A short break in the monsoon has been followed by fair general rain, and *kharif* prospects are favourable. Markets are well supplied, and prices are stationary.

Punjab.—*For week ending 24th July.*—Rainfall general throughout the Province. Prices rising in Rawalpindi; falling in Shahpur; unsettled in Peshawar; stationary elsewhere. Ploughings for and sowings of *kharif* crops still in progress. Rain is reported to be still insufficient in Sialkote. Prospects of standing crops good. Crops on the Jhelum in the Shahpur district slightly injured by river inundations. Cotton crops are under water in parts of

Dera Ismail Khan owing to heavy flood in the Indus. Stock cattle are reported healthy. Fodder sufficient, except in Sirsa in district Hissar.

Central Provinces.—*For week ending 24th July.*—Rain general. Crops thriving, but more rain is required for rice in Nagpur and parts of Jubbulpore and Bilaspur. Rice sowings were delayed in Sambalpur, but good showers have now fallen, and prospects are improved.

Burma.—*For week ending 20th July.*—The rainfall in Lower Burma, with the exception of Thongwa, has been very light, taking the total inches to date as compared with 1888. Rain is badly wanted in North Tharrawaddy, and the want is felt in Thayetmyo and Toungoo. In Rangoon 29·78 inches have fallen since the commencement of the year against 54·46 in 1888. In Upper Burma the total rainfall since the commencement of the year has been in excess of the fall in 1888 in most districts, but in Shwebo the want of rain is felt, also in Yeu and Meiktila. In Lower Burma the price of paddy has fallen in Mergui, but in other districts the prices remain more or less stationary. In Upper Burma there is a slight rise in prices in Upper Chindwin and Pinyinmana, and a fall in Lower Chindwin. The food-supply is sufficient.

Assam.—*For week ending 24th July.*—Weather sunny, with heavy showers. Harvesting of early and transplanting of winter rice continue. Tea doing well. Prospects of crops in general good.

Mysore and Coorg.—*For week ending 24th July.*—Rainfall good in the Shimoga and Kadur districts of Mysore and scanty in other parts. Standing crops good. Outturn of crops harvested fair. Prices slightly risen in the Bangalore district.

Good rain in Coorg. Transplanting of paddy in progress. Crops in good condition.

Berar and Hyderabad.—*For week ending 24th July.*—Average rainfall good in Berar. Sowing of *jowari* and *tūr* completed. Weeding operations continue. Cotton plants in good condition. Fodder and water sufficient. Prices stationary. Agricultural stock in good condition.

Good rain in Hyderabad during the week. Sowing of *abi* and *kharif* crops still continues in some talukas and weeding commenced in others. Water in tanks insufficient. Scarcity of fodder felt in one taluka only. Prices stationary.

Central India.—*For week ending 24th July.*—Good rain throughout Central India during the week. Prospects good. Prices falling in Western Malwa and Alirajpur and Jhabua in Bhopawar Agency.

Rajputana.—*For week ending 24th July.*—Heavy rain in Kherwara and Shahpura; slight in Marwar, and moderate elsewhere. Agricultural operations and standing crops satisfactory. Agricultural stock good. Pasturage or fodder sufficient. Prices falling in Meywar, Harowti, and Dholepore; steady elsewhere.

Nepal.—*For week ending 18th July.*—Good rain. Weather fair. Prospects good.

E. C. BUCK,
Secretary to the Government of India.

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
RAILWAY TRAFFIC.

No. XIII. OF 1889-90.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used as far as possible.

N.B.—As regards the figures in column <i>Total Receipts</i> from 1st April to 30th June, 1888, and <i>Total Receipts</i> from 1st April to 29th June, 1889.													
Latest Return received.	RAILWAYS.	WEEK ENDING 30TH JUNE, 1888.			WEEK ENDING 29TH JUNE, 1889.			TOTAL RECEIPTS FROM 1ST APRIL TO 30TH JUNE, 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 29TH JUNE, 1889.		Total increase in 1889-90.	Total decrease in 1889-90.
		Total mean length open.	Receipts.		Total mean length open.	Receipts.		Total.	Per mile open per week.	Total.	Per mile open per week.		
			Total.	Per mile open.		Total.	Per mile open.						
			Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
<i>State Lines worked by Companies.</i>													
First 13 days of July, 1889	East Indian	1,514	5,80,133	383	1,514	7,95,724	526	1,19,08,831	605	1,19,22,519	613	13,688	...
Ditto ditto	Patna-Gya.	57	9,476	166	57	2,058	124	1,13,223	153	1,12,174	153	...	1,749
Ditto ditto	Dildarnagar-Ghazipur	12	762	64	12	840	70	15,872	102	13,380	87	...	2,492
Ditto ditto	Sindia	75	7,775	104	...	(a)	...	1,06,864	190	(a)	...	...	1,06,864
6th July, 1889	Rajputana-Malwa	1,664	4,85,563	292	1,664	3,88,000	233	52,77,973	244	59,22,072	277	6,44,099	...
First 6 days of July, 1889	Bengal-Nagpur (b)	186	43,335	233	305	(c) 27,565	90	5,18,233	214	(c) 6,09,694	161	91,461	...
Ditto ditto	Southern Maratha (d)	850	77,516	91	857	70,746	83	10,55,134	96	11,73,441	106	1,18,307	...
Ditto ditto	Do. Mysore Section	140	12,193	87	219	13,999	64	1,30,648	75	1,87,945	67	51,297	...
Ditto ditto	Indian Midland	136	19,088	140	674	(e) 44,251	66	2,23,615	126	(e) 8,22,688	104	5,99,073	...
Ditto ditto	Vilupuram-Dhar m a veram (Nellore Branch)	83	15,641	188	83	4,861	59	68,531	63	64,806	61	...	3,725
Last 8 days of June, 1889	Bareilly-Pilibhit	36	1,631	45	36	1,752	49	21,648	46	28,350	61	6,702	...
	TOTAL	4,753	12,53,113	264	5,421	13,54,796	250	1,94,47,272	315	2,08,57,069	303	14,09,797	...
<i>State Lines worked by Government.</i>													
13th July, 1889	North Western (f)	2,411	5,42,540	225	2,386	4,69,000	197	62,62,856	200	69,28,722	226	6,65,866	...
First 6 days of July, 1889	Oudh and Rohilkhand	693	1,08,678	243	692	1,57,935	228	21,12,931	236	22,61,238	254	1,48,307	...
Last 8 days of June, 1889	Bengal Central	125	14,451	116	125	12,758	102	1,61,802	100	1,81,146	113	19,344	...
First 6 days of July, 1889	Wardha Coal	45	16,350	363	45	6,014	134	1,96,910	337	2,18,258	377	21,348	...
Last 8 days of June, 1889	Eastern Bengal Railways	673	1,85,656	276	673	1,45,644	216	19,55,471	223	21,07,703	244	1,52,232	...
Ditto ditto	Nalhati	27	2,044	75	27	2,085	77	26,428	75	23,784	68	...	2,644
First 13 days of July, 1889	Tirhoot	259	30,813	119	273	31,310	115	4,97,639	148	5,10,321	145	12,682	...
First 6 days of July, 1889	Lucknow-Sitapur	105	6,051	58	105	6,448	61	75,107	55	95,424	71	20,317	...
	Sihramau	25	858	34	25	792	31	13,557	42	14,364	39	807	...
Last 1 day of June, 1889	Jorhat	7	102	14	7	234	31	1,140	12	1,239	13	99	...
20th June, 1889	Cherra-Companyganj	392	56,634	144	553	88,305	160	8,31,375	171	12,56,441	176	4,25,066	...
Last 8 days of June, 1889	Burma												...
	TOTAL	4,762	10,24,177	215	4,911	9,20,525	187	1,21,35,216	197	1,35,98,640	216	14,63,424	...
<i>Lines worked by Guaranteed Companies.</i>													
First 6 days of July, 1889	Madras	840	2,12,759	253	840	2,02,360	241	21,55,953	197	23,88,852	221	2,33,799	...
Ditto ditto	South Indian	654	1,31,383	201	654	1,04,974	159	14,49,599	171	15,11,732	180	62,133	...
Ditto ditto	Great Indian Peninsula	1,497	(g) 6,74,211	451	1,440	(h) 4,38,305	304	1,37,41,982	703	1,04,80,940	566	...	32,61,042
6th July, 1889	Bombay, Baroda and Central India (i)	461	2,79,154	606	461	1,83,000	397	39,34,930	657	40,09,847	677	74,911	...
	TOTAL	3,452	12,97,507	376	3,395	9,27,739	273	2,12,81,570	474	1,83,91,371	421	...	28,90,199
GRAND TOTAL (GUARANTEED AND STATE)													
		12,967	35,74,797	276	13,727	32,03,060	233	5,28,64,058	314	5,28,47,080	301	...	16,978
GROSS ESTIMATED EXPENSES													
		...	...	...	...	...	...	2,49,03,204	148	2,48,90,947	142	...	12,257
NET RECEIPTS													
		...	...	...	...	...	...	2,79,60,854	166	2,79,56,133	159	...	4,721
<i>Assisted Companies.</i>													
First 13 days of July, 1889	Tarakeshwar	22	5,608	255	22	5,436	247	8,348	288	82,930	293	...	409
22nd June, 1889	Dibru-Sadiya	...	...	...	...	(j)	...	(k) 1,00,777	108	(l) 1,15,526	123	14,749	...
First 13 days of July, 1889	Bengal and North Western	376	58,950	157	376	75,644	201	7,68,351	157	7,80,829	162	12,478	...
Last 8 days of June, 1889	Rohilkhand-Kumaun	67	10,664	159	67	11,749	175	1,00,635	116	1,09,486	127	8,851	...
	TOTAL	465	75,222	162	465	92,829	200	10,53,111	149	10,88,780	156	35,669	...
<i>Native States.</i>													
First 6 days of July, 1889	His Highness the Nizam's Guaranteed Company	277	39,443	142	354	45,874	130	4,05,010	112	5,33,551	117	1,28,541	...
6th July, 1889	His Highness the Gaekwar's	59	2,070	35	59	2,810	48	44,403	58	38,951	51	...	5,452
6th ditto	His Highness the Gaekwar's Veramgam	21	804	38	27	1,000	37	14,391	53	16,593	48	2,202	...
First 6 days of July, 1889	Mehsana-Vadnagar	193	19,830	103	260	21,502	83	3,17,635	127	4,41,370	132	1,23,735	...
Ditto ditto	Bhavnagar-Gondal	68	3,066	45	68	4,048	68	60,495	68	67,062	77	6,507	...
6th July, 1889	Junagarh-Porbandar	124	11,419	92	124	8,600	69	1,06,835	66	98,546	62	...	8,289
	TOTAL	742	76,632	103	892	84,434	95	9,48,769	98	11,96,073	104	2,47,304	...

(a) Included with the Indian Midland Railway.

(b) Includes the Katni-Umaria Branch.

(c) Includes Sanctoria Coal Section of the Bengal-Nagpur Railway.

(d) Includes the Bellary-Kistna State Railway.

(e) Includes the Sindia and Bhopal-Itarsi State Railways.

(f) Includes the Amritsar-Pathankot and Rajpura-Bhatinda State Railways.

(g) Includes the Dhond-Mannmad, Khimgaon, Amraoti, and Bhopal-Itarsi State Railways.

(h) Includes the Dhond-Mannmad, Khimgaon, and Amraoti State Railways.

(i) Includes the Patri Branch.

(j) Return not received.

(k) Total receipts from 1st April to 23rd June, 1888.

(l) Total receipts from 1st April to 22nd June, 1889.

M. C. BRACKENBURY, Major, R.E.,

Under Secretary.

SIMLA, 25th July, 1889.



SUPPLEMENT TO
The Gazette of India.

No. 31. } CALCUTTA, SATURDAY, AUGUST 3, 1889.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.

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No Official Orders or Notifications, the Publication of which in the GAZETTE OF INDIA is required by Law, or which it has been customary to publish in the CALCUTTA GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be looked to.

GOVERNMENT OF INDIA.
DEPARTMENT OF FINANCE AND COMMERCE.

RETAIL PRICES FOR THE 1st HALF OF JUNE 1889.

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.

DISTRICTS.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLU (Sorghum vulgare).		BAJRA OR CUMBU (Pennisetum typhoides).		MARUA OR RAGI (Eleusine indica).		KANGNI OR KAKUN, ITALIAN MILLET (Setaria italica).		GRAM, CHENNA, CHOLA, KADALAY OR SUNAGA (Cicer arietinum).		MAIZE (Zea Mays).		ARHAR OR THUR CADIAN PEA (Cajanus indicus).		FIREWOOD.		SALT.	
	Present.	Past.	Present.	Past.	Present.	Past.	Present.	Past.	Present.	Past.	Present.	Past.	Present.	Past.	Present.	Past.	Present.	Past.	Present.	Past.	Present.	Past.	Present.	Past.	Present.	Past.
	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
Burma—																										
<i>Tenasserim—</i>																										
Mergui	7 14	7 14	...	...	10 4	9 14	10 14	10 14	...	...	...	...	...	...	...	...	...	...	...	...	...	428 0	428 0	14 9	19 7	...
Tavoy	7 14	7 14	...	...	11 4	12 6	13 4	14 13	...	...	...	...	...	...	...	...	...	...	...	...	...	399 3	399 3	24 2	24 2	...
Moulmein and Amherst	7 14	7 14	...	...	9 11	10 8	10 2	12 2	...	...	...	...	...	...	...	...	...	...	...	...	...	220 0	220 0	20 8	20 3	...
<i>Pegu (delicate)—</i>																										
Pegu	11 2	11 2	...	...	10 4	10 4	15 0	14 10	...	...	...	...	...	...	...	...	...	...	...	...	...	157 0	157 0	17 10	17 10	...
Rangoon	11 2	11 2	...	...	12 6	10 6	13 2	11 2	...	...	...	...	...	...	...	...	...	...	...	...	...	250 0	250 0	16 10	14 9	...
Thongwa . . . . .	...	...	...	...	10 13	10 11	12 13	12 13	...	...	...	...	...	...	...	...	...	...	...	...	...	151 0	150 0	18 11	18 11	...
Bassein . . . . .	...	...	...	...	11 9	10 13	14 0	13 14	...	...	...	...	...	...	...	...	...	...	...	...	...	194 1	215 13	14 3	14 3	...
<i>Pegu (inferior)—</i>																										
Shwaygyin . . . . .	...	...	...	...	9 1	9 1	10 6	9 9	...	...	...	...	...	...	...	...	...	...	...	...	...	250 0	250 0	11 5	14 2	...
Tharawadi . . . . .	...	...	...	...	12 0	12 8	15 0	15 10	...	...	...	...	...	...	...	...	...	...	...	...	...	450 0	450 0	14 0	14 0	...
Hehrada . . . . .	...	...	...	...	10 4	10 4	13 10	13 10	...	...	...	...	...	...	...	...	...	...	...	...	...	183 8	183 8	16 2	17 11	...
Prome	10 6	10 6	...	...	10 12	11 10	13 1	13 1	...	...	...	...	...	...	...	...	...	...	...	...	...	167 9	167 9	14 0	14 0	...
Toungoo . . . . .	...	...	...	...	9 2	9 2	12 13	12 13	...	...	...	...	...	...	...	...	...	...	...	...	...	200 0	200 0	14 1	14 1	...
Thayetmyo	11 3	11 3	...	...	10 12	10 12	12 9	12 9	...	...	...	...	...	...	...	...	...	...	...	...	...	326 11	326 11	11 3	11 3	...
<i>Upper Burma—</i>																										
Mandalay	11 0	10 10	...	...	11 5	11 0	12 5	12 6	...	...	...	...	...	...	...	...	...	...	...	...	...	75 0	75 0	16 13	16 0	...
<i>Arakan—</i>																										
Sandoway . . . . .	...	...	...	...	12 0	14 14	14 0	16 9	...	...	...	...	...	...	...	...	...	...	...	...	...	469 11	469 11	24 0	21 5	...
Kyauk-pyu . . . . .	...	...	...	...	12 2	12 14	13 3	13 14	...	...	...	...	...	...	...	...	...	...	...	...	...	340 0	333 0	30 0	30 0	...
Akyab . . . . .	...	...	...	...	12 0	12 0	14 0	14 8	...	...	...	...	...	...	...	...	...	...	...	...	...	180 0	180 0	21 0	21 0	...
Assam—																										
<i>Surma—</i>																										
Sylhet	11 4	10 0	...	...	14 0	14 14	15 12	15 12	...	...	...	...	...	...	...	...	...	...	...	...	...	108 0	108 0	9 6	9 8	...
Cachar	7 8	7 12	...	...	12 0	12 0	14 8	16 0	...	...	...	...	...	...	...	...	...	...	...	...	...	80 0	80 0	9 4	9 8	...
Khasi and Jaintia Hills . . . . .	...	...	...	...	5 12	5 11	8 11	8 13	...	...	...	...	...	...	...	...	...	...	...	...	...	100 0	100 0	7 0	7 0	...
Garo Hills . . . . .	...	...	...	...	6 0	6 0	13 0	15 0	...	...	...	...	...	...	...	...	...	...	...	...	...	160 0	160 0	6 7	6 7	...
<i>Brahmaputra—</i>																										
Goalpara	16 0	16 0	...	...	8 0	8 0	14 0	16 0	...	...	...	...	...	...	...	...	...	...	...	...	...	80 0	80 0	9 8	9 8	...
Kamrup	10 0	10 0	...	...	8 0	8 0	17 0	16 0	...	...	...	...	...	...	...	...	...	...	...	...	...	160 0	160 0	9 0	9 0	...
Darrang	6 8	7 0	...	...	12 8	12 0	14 0	14 0	...	...	...	...	...	...	...	...	...	...	...	...	...	150 0	150 0	8 8	8 0	...
Nowgong	8 0	8 0	...	...	8 0	7 0	16 0	16 0	...	...	...	...	...	...	...	...	...	...	...	...	...	120 0	120 0	8 0	8 0	...
Sibsagar . . . . .	...	...	...	...	6 8	6 8	17 0	16 0	...	...	...	...	...	...	...	...	...	...	...	...	...	200 0	200 0	7 0	7 8	...
Lakhimpur	8 0	8 0	...	...	6 8	7 0	11 0	12 0	...	...	...	...	...	...	...	...	...	...	...	...	...	160 0	160 0	8 0	8 0	...

[illegible]

† Not procurable.

* Not sold.

RETAIL PRICES FOR THE 1st HALF OF JUNE 1889—continued.

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.

DISTRICTS.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLU (<i>Sorghum vulgare</i>).		BAJRA OR CUMBU (<i>Pennisetum typhoides</i>).		MARUA OR RAGI (<i>Eleusine coracana</i>).		KANGNI OR KAKUN, ITALIAN MILLET (<i>Setaria italica</i>).		GRAM, CHENNA, CHOLA, KADALAY OR SUNAGA (<i>Cicer aridinum</i>).		MAIZE (<i>Zea Mays</i>).		ARHAR OR THUR PEA (<i>Caranus indicus</i>).		FIREWOOD.		SALT.		
	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	
Bengal—continued.																											
Behar, south—																											
Monghyr	17 5	16 4	21 0	21 0	10 8	10 8	11 9	11 9	...	...	...	...	...	...	10 0	16 12	21 0	20 0	8 6	9 8	17 5	16 12	147 0	147 0	9 8	9 8
Gya	15 8	15 8	21 0	21 0	8 4	8 4	12 8	12 8	...	...	...	...	...	...	11 0	11 0	18 0	18 0	...	...	17 0	16 0	200 0	200 0	9 2	9 2
Patna	16 0	15 8	19 0	20 0	10 0	10 0	13 8	13 8	20 8	21 0	19 8	...	...	...	11 0	12 0	21 8	21 0	19 0	...	21 0	20 0	130 0	130 0	10 0	10 0
Shahabad	14 0	14 0	20 0	20 0	9 0	8 0	13 0	12 0	...	...	...	...	...	...	...	...	19 0	20 0	...	...	13 8	13 0	160 0	160 0	10 0	10 0
Behar, north—																											
Purneah	15 0	16 0	...	...	12 0	13 0	14 0	16 0	...	...	...	...	...	...	...	...	20 0	20 0	...	...	...	...	...	...	...	...
Bhagalpur	14 8	15 7	17 10	17 10	11 6	10 2	13 4	12 10	...	...	...	...	...	...	...	...	17 10	17 10	16 6	16 6	17 10	17 0	176 12	176 12	10 1	10 1
Durbhunga	13 11	14 4	18 4	18 4	10 4	10 4	12 9	13 4	17 2	11 6	...	...	...	...	8 0	11 6	18 13	18 13	16 0	16 0	18 13	18 8	160 0	160 0	11 6	11 6
Muzafferpore	13 0	13 0	16 0	16 0	9 0	9 0	12 0	12 0	...	...	...	...	...	...	...	...	17 0	18 0	16 0	16 0	18 0	18 0	160 0	160 0	10 0	10 0
Satun	13 12	13 8	18 8	19 0	8 8	8 8	12 2	12 2	...	...	...	...	...	...	...	...	18 4	19 4	17 4	17 4	20 0	20 0	160 0	160 0	10 0	10 0
Champaran	14 0	13 0	17 0	18 0	7 0	7 0	11 0	11 0	...	...	...	...	...	...	...	...	16 8	16 0	15 0	15 0	19 0	17 8	160 0	160 0	9 8	9 8
N.-W. Provinces—																											
Eastern—																											
Mirzapur	13 0	14 0	17 0	18 0	7 8	7 8	11 6	12 0	16 0	17 0	14 0	15 0	16 0	16 0	12 0	12 0	17 0	17 0	17 0	18 0	19 0	19 0	100 0	100 0	10 0	10 0	
Benares	14 6	14 10	18 2	18 2	6 6	6 6	11 2	11 2	14 10	16 13	14 1	14 1	10 5	11 6	12 8	12 8	17 14	18 7	19 8	18 0	18 2	19 0	120 0	120 0	10 6	10 6	
Ghazipur	15 7	15 7	18 10	20 0	6 7	6 7	11 0	11 0	15 7	18 0	14 3	15 7	...	...	...	...	20 12	20 10	18 0	18 0	20 0	20 10	154 0	154 0	9 10	9 10
Jaunpur	14 0	13 8	19 0	18 8	7 0	7 0	12 0	14 0	...	...	...	...	...	...	...	...	19 8	19 12	16 0	16 0	20 0	21 0	140 0	140 0	8 8	8 8
Allahabad	13 12	13 8	18 8	18 8	7 0	7 0	10 0	10 0	...	...	...	...	...	...	...	...	19 8	19 12	16 0	16 0	20 0	18 8	120 0	120 0	10 0	10 0
Central—																											
Banda	14 4	15 4	18 0	21 8	7 0	8 0	11 8	11 8	...	...	...	...	...	...	...	...	19 12	22 0	...	...	15 0	15 0	160 0	160 0	9 12	9 12
Fatehpur	14 12	16 0	19 0	20 0	11 0	10 12	11 8	12 0	...	...	...	...	...	...	...	...	20 8	20 8	...	...	22 0	23 8	160 0	160 0	10 0	10 0
Hamirpur	15 6	16 0	21 1	23 0	9 0	9 0	10 13	11 8	...	...	...	...	...	...	...	...	22 9	23 13	18 0	18 0	23 9	26 2	140 0	140 0	10 4	10 4
Jalaun	16 0	16 0	22 0	22 0	9 0	9 0	10 0	10 0	18 0	18 0	17 0	15 0	15 0	16 0	16 0	16 0	22 0	23 0	18 0	18 0	24 0	24 0	140 0	140 0	10 0	10 0	
Cawnpore	15 12	17 0	21 8	22 12	8 0	8 0	11 0	12 0	19 0	19 0	19 0	19 0	...	...	20 0	19 0	22 8	22 12	17 0	17 0	23 4	23 0	160 0	160 0	12 0	12 0
Etawah	16 4	17 0	22 8	22 8	5 8	6 8	10 0	12 0	19 4	19 8	20 4	18 0	20 0	20 0	15 0	16 0	21 12	24 0	17 0	17 0	24 0	24 0	120 0	120 0	11 0	11 0	
Farrukhabad	15 0	16 12	21 0	22 8	6 8	6 8	10 0	9 12	...	...	...	...	...	...	...	...	23 8	24 0	...	...	24 0	24 0	140 0	140 0	10 0	10 0
Mainpuri	17 2	18 4	23 12	25 4	4 8	4 4	12 3	13 4	...	...	...	...	...	...	...	...	25 5	25 12	...	...	26 2	25 14	160 0	160 0	11 0	10 0
Etah	17 12	17 12	23 12	24 12	7 8	7 8	11 0	11 0	...	...	...	...	...	...	12 0	14 0	29 0	30 0	...	...	19 4	19 8	160 0	160 0	11 0	10 12
Western—																											
Lalitpur	15 8	16 0	20 0	21 0	9 0	8 0	10 8	10 8	18 0	20 0	15 0	15 0	18 0	20 0	16 0	15 0	18 4	18 0	18 0	21 0	12 0	12 4	160 0	160 0	10 0	10 0	
Jhansi	16 1	16 1	21 14	21 8	8 0	8 0	12 3	12 8	21 4	21 7	20 4	21 0	...	...	...	...	19 12	19 11	...	...	17 8	17 8	180 0	180 0	10 8	10 8
Agra	14 4	15 0	19 8	21 0	5 0	5 0	9 0	9 0	20 0	20 0	18 8	18 8	...	...	17 0	17 0	21 0	22 0	25 0	28 0	...	...	160 0	160 0	11 8	11 8
Muttra	14 6	15 0	22 0	22 8	7 0	7 8	10 0	11 8	17 0	18 0	16 8	18 0	...	...	8 0	8 0	23 8	23 8	24 0	25 0	28 0	28 0	140 0	140 0	11 8	11 8
Aligarh	16 8	16 12	23 10	24 8	6 0	7 0	10 12	11 0	21 8	23 0	19 0	19 8	...	...	15 0	15 0	24 2	24 2	28 0	28 0	27 8	27 8	160 0	160 0	11 0	11 0
Bulandshahr	16 10	17 10	25 4	26 0	7 0	7 0	10 8	10 8	18 0	20 0	20 0	20 0	...	...	16 0	15 0	25 0	26 8	28 0	28 0	19 0	19 8	120 0	120 0	11 0	11 0
Meerut	16 12	17 0	26 8	26 8	5 8	5 8	11 0	13 0	20 0	20 0	20 0	20 0	14 0	14 0	14 0	14 0	22 8	23 8	25 0	25 0	25 0	24 8	100 0	100 0	11 4	11 8	
Sub-montane—																											
Balla	10 8	14 4	19 4	19 4	8 4	8 4	13 4	13 0	...	...	...	...	...	...	...	...	20 8	20 8	...	...	20 8	21 0	155 0	155 0	10 4	10 8
Azamgarh	13 4	13 4	18 8	20 10	8 14	8 14	12 8	12 8	...	...	...	...	...	...	...	...	18 8	17 11	...	...	14 0	13 10	177 8	177 8	9 13	9 13
Gorakhpur	12 6	13 8	20 13	20 13	9 0	9 0	11 4	11 0	...	...	...	...	...	...	14 6	14 6	20 0	20 0	...	...	20 12	20 0	140 0	140 0	10 7	10 6
Basti	15 0	16 0	22 0	23 0	...	...	23 0	22 0	12 0	12 0	...	...	...	...	9 0	9 0	22 0	22 0	20 0	20 0	21 0	21 0	140 0	140 0	10 0	10 0
Shahjahanpur	16 8	17 8	25 8	25 8	8 8	8 8	14 0	14 0	...	...	...	...	...	...	20 0	20 0	24 0	24 0	...	...	25 8	25 8	160 0	160 0	9 8	10 0
Budaun	17 4	17 12	25 4	27 0	6 0	6 0	11 4	11 8	...	...	...	...	...	...	...	...	25 8	26 0	...	...	28 0	28 0	192 0	192 0	10 8	10 6
Fulbit	16 12	15 8	25 0	25 0	11 4	11 4	12 8	12 8	25 0	25 0	20 0	20 0	...	...	...	...	20 0	20 8	25 0	25 0	22 8	16 8	150 0	150 0	11 4	11 4

Bareilly	14	6	15	10	22	8	23	13	5	0	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15	10	15
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+ Six pies per bundle

† For husked grain.

* Not sold.

RETAIL PRICES FOR THE 1st HALF OF JUNE 1880 — continued.

[illegible]

RETAIL PRICES FOR THE 1st HALF OF JUNE 1889—concluded.
QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.

QUANTITIES PER RUPEE IN SERS OF 80 TOLAS.																										
DISTRICTS.	WHEAT.		BARLEY.		RICE, BEST SORT.		RICE, COMMON.		JOWAR OR CHOLU (<i>Sorghum vulgare</i>).		BAJRA OR CUMBU (<i>Pennisetum typhoides</i>).		MARUA OR RAGI (<i>Eragrostis indica</i>).		KANGNI OR ITALIAN MILLET (<i>Setaria italica</i>).		GRAM, CHENNA, CHOLA, KADALAY OR SUNAGA (<i>Cicer arietinum</i>).		MAIZE (<i>Zea Mays</i>).		ARHAR OR THUR CADJAN PEA (<i>Cajanus indicus</i>).		FIREWOOD.		SALT.	
	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.	Present fortnight.	Past fortnight.		
Madras—																										
<i>Malabar Coast—</i>																										
Malabar	8 10	8 10	...	11 13	12 10	12 10	...	...	20 6	21 13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
S. Canara	8 2	8 2	...	9 2	11 14	12 0	...	...	21 13	21 13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<i>South, central—</i>																										
Coimbatore	11 8	11 8	...	12 10	13 10	13 10	21 11	25 6	28 0	28 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nilgiris	9 14	9 14	...	9 10	11 3	11 3	21 10	16 13	20 14	21 10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Salem	10 13	10 3	...	11 13	13 11	13 11	25 14	21 5	30 13	30 13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<i>Central—</i>																										
Bellary	13 6	13 14	...	11 3	12 6	12 6	27 5	20 11	33 0	32 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Anantapur	11 8	11 8	...	12 13	14 0	15 2	30 14	25 6	31 0	32 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cuddapah	12 8	11 13	...	11 2	14 2	14 2	22 8	21 5	30 0	28 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kurnool	11 6	11 6	...	10 11	11 6	11 6	22 14	20 0	20 0	20 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<i>East Coast, north—</i>																										
Ganjam	8 14	9 13	...	10 0	11 0	10 11	...	...	16 6	18 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vizagapatam	12 0	13 0	...	9 0	10 3	10 3	18 6	15 13	17 13	18 3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Godavari	11 11	11 11	...	12 14	13 14	14 0	24 0	20 3	21 2	25 8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<i>East Coast, central—</i>																										
Kistna	10 6	10 6	...	11 8	12 0	12 2	20 8	23 8	23 13	23 13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nellore	10 10	9 14	...	12 3	13 3	12 8	24 11	21 13	27 13	26 6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<i>East Coast, south—</i>																										
Madras	10 10	10 10	...	11 8	12 13	13 5	...	...	28 2	28 2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chingleput . . . . .	...	...	...	12 11	13 2	14 0	...	...	26 11	26 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
N. Arcot	9 6	9 6	...	12 3	13 3	13 3	...	...	33 6	33 6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
S. Arcot	8 10	8 10	...	13 14	14 0	14 0	...	...	23 14	23 14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tanjore	8 13	8 13	...	13 6	14 2	14 2	...	...	26 6	26 6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Trichinopoly	8 14	8 10	...	12 3	12 3	12 11	21 0	20 5	24 14	24 14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<i>Southern—</i>																										
Tinnevely	9 14	10 11	...	11 2	11 10	12 6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Madura	9 11	10 2	...	12 10	13 6	13 14	23 8	22 0	26 5	26 5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<i>Mysore—</i>																										
Mysore	10 0	10 0	10 0	10 0	11 0	11 0	29 0	24 0	30 0	30 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bangalore	10 8	11 0	11 0	8 8	9 8	10 0	28 0	16 0	32 0	32 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kolar . . . . .	...	...	11 0	10 4	10 0	12 0	...	...	40 0	42 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tumkur	11 0	11 0	11 0	11 0	11 0	13 0	...	...	48 0	48 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hassan . . . . .	...	...	11 0	11 0	11 0	13 0	...	...	38 0	38 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kadur	10 0	10 0	11 0	12 0	15 0	16 0	...	...	40 0	40 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Shimoga	11 9	10 8	12 10	10 8	14 11	14 11	31 8	...	45 2	43 1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chitaldrug	13 0	13 0	15 0	11 0	13 0	13 0	40 0	32 0	55 0	55 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<i>Coorg—</i>																										
Coorg	9 0	9 0	8 0	11 8	12 8	14 0	...	...	35 0	35 0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<i>Aden</i>	8 0	8 0	...	6 3	5 9	8 0	10 3	9 4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

* Not sold.

DEPARTMENT OF FINANCE AND COMMERCE,
(Statistical Branch).

E. J. SINKINSON,
Offg. Secretary to the Government of India.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

**Weather Review of India for the week ending at 8 a.m. on
Monday, July 29th, 1889.**

The weather of the past week has been very quiet. No storm of any importance has been developed or appeared within the Indian region, and the force of the monsoon currents on both sides of India has decreased steadily during the week. A slight break in the rains has prevailed over North-Western India and to a less extent over the Central parts of the country during the greater part of the period under review, but quite at the close of the week the rainfall area was extending and rain apparently spreading into Upper India.

The Chart of the 23rd showed fairly normal monsoon conditions over nearly the whole country. There was a difference of half an inch in pressure between the south and north of India, and a fairly strong monsoon was blowing on both sides of India. The only important irregularity in the distribution of pressure was that the low pressure trough, which ordinarily lies along the centre of the Gangetic plain, was pushed northward to the foot of the hills. In consequence the slightly higher pressures which normally prevail between the Ganges and the foot of the hills were absent, and with them the south-easterly winds, which under average conditions prevail along the northern side of the Gangetic plain. A similar distribution of pressure prevailed on the 24th, and the wind was westerly (west-south-west—west-north-west) over nearly the whole of India, except the Bay, Burma, and Bengal, where the wind drew into south. The Arabian Sea monsoon blew freshly across the West Coast from Karachi to Bombay and inland over Guzerat, Rajputana, and the Central parts of the country. To the south of Bombay the wind was lighter and the Bay monsoon was not strong, except just at the head of the Bay. The Chart of the 25th showed that the area of lowest pressure which during the two previous days had existed over the north of the Punjab had been transferred to Lower Sind. This change in the distribution was accompanied by the appearance of easterly and south-easterly winds at a few stations in Northern India, but otherwise the wind circulation was the same in all important respects as that reported on the preceding day. On the 26th a moderate to brisk barometric rise was reported from Northern India and a slight fall from the Peninsula. In consequence the difference of pressure between the south and north had decreased, and the 0.50" which was the difference on the 23rd had been reduced to 0.35". This reduction in the gradient had been accompanied by a fall in the wind force, and the monsoon currents were generally feeble. By the morning of the 27th the area of lowest pressure had been retransferred to the north of the Punjab, and the distribution as well as the accompanying wind circulation were the same as those reported at the commencement of the week. On the 28th there was no change in the relative positions of the areas of high and low pressures, but the barometric difference had become even slighter and the monsoons were very feeble and variable. The Chart of the 29th showed that a very shallow barometric depression was drifting across the Central parts of the country. In consequence the southerly winds from the Bay now drew into south-east and east up the Gangetic plain, and the wind circulation was less abnormal than it had been during the whole of the week.

Temperature has, over the greater part of India, been fairly steady and uniform. In Burma, Bengal, and the North-Western Provinces the mean temperature has oscillated by small amounts about the normal; but in the Punjab, Bombay, the Central Provinces, Guzerat, Central India, Sind, and Rajputana it has been continually and on the whole steadily above the normal average, while in Madras it has been almost equally steadily below it. The maxima have been several degrees higher than usual over Western and Central India, the hottest days being the 28th and 29th, when readings considerably exceeding 100° were recorded all over North-Western India. The highest reading reported during the week occurred however as early as the 25th, when Jacobabad recorded 116°.

The following table shows the excess or defect of the mean average temperatures of the different Provinces for the present and for the preceding week :

PROVINCE.	Difference of Mean Temperature of Last Week from Normal.	Difference of Mean Temperature of Present Week from Normal.
Burmah	+ 1.6°	+ 0.7°
Bengal	+ 2.1°	— 0.1°
North-Western Provinces	+ 1.8°	+ 0.3°
Punjab	+ 0.7°	+ 3.1°
Bombay	— 0.1°	+ 1.3°
Central Provinces and Berar	+ 1.5°	+ 2.2°
Guzerat and Central India	+ 2.3°	+ 1.4°
Sind and Rajputana	+ 3.4°	+ 1.9°
Madras	— 0.6°	— 0.1°

This table shows that the weather relatively to the average has been hotter than it was last week in the Punjab, Bombay, the Central Provinces, Berar, and Madras, and that elsewhere it has been generally cooler. The largest changes are in Bengal and the Punjab.

Rain.—There has been a partial break in the rains over Upper India and the Central parts of the country. This has been due apparently to two causes. In the first place, owing to the abnormally northerly position of the low pressure area over the Gangetic plain, the south-easterly winds, which are the usual accompaniments of rain in Upper India, have been absent; and in the second place, to the weakness of the monsoon on the West Coast. It is important to note that, though the plains have been to a large extent without rain, the hill and submontane stations have received heavy amounts.

The following is a brief description of the daily distribution of rainfall :

On the 23rd there was no rain over the Punjab, Rajputana, Central India, the Western desert, or the east and centre of the Peninsula, except the extreme north and south. Elsewhere rain was general, and heavy in parts of Bengal and the North-Western Provinces. On the 24th there was a little rain along the foot of the hills in the Punjab, but otherwise the distribution was the same as on the 23rd. On the 25th the only change of importance was the extension of the rainfall on the East Coast. On the 26th there was hardly any rain over the whole of North-Western and Central India, but general rain elsewhere. The same distribution continued during the 27th and 28th, but on the 29th rain again extended along the foot of the hills, reaching as far as Rawalpindi in the Punjab.

The table at the close of the Summary shows that at 18 of the rainfall districts the amount of rain has been in excess of the normal rainfall of the week, and that at 32 the rain has been defective. In Burma, Deltaic Bengal, Orissa, the North-Western Provinces Central and West, and the whole of the Punjab except the hill stations, the rainfall has been short, but in all other parts of Northern India it has been excessive—more particularly so on, and along the foot of, the hills. All over the western districts of the Peninsula, the Central parts of the country, Bombay (North), and Rajputana the rainfall is defective, while in the eastern half of the Peninsula the variations are irregular. The regions of greatest excess are Assam (Surma), North Bengal, Oudh (North), and the hill districts of the Punjab. The maximum falls are not on the whole remarkable over North-Eastern India, but Cherrapunji received 63 inches and Kurseong 28 inches. In Upper India all the more important falls occurred on or near the hills: thus Dera Dun received 12½ inches, Naini Tal 26 inches, Padraura (Gorakhpur) 17½ inches, and Simla 14½ inches. All over the Peninsula and the Central parts of the country none of the falls were remarkable.

The column giving the state of the seasonal rainfall shows that in Burma and East Bengal the rain is deficient, but that in all other parts of Bengal, as well as in Oudh and the east of the North-Western Provinces, the rainfall has equalled or exceeded the average. The western parts of the North-Western Provinces and the whole of the Punjab, except the submontane and hill districts, have had short rain. In the West Coast districts, Madras (South Central), the Konkan, Guzerat, and Kattiawar have all had more than the normal rainfall, but the other districts, as well as those in the Central parts of India and of the Peninsula, have had less. On the East Coast the variations are irregular.

PROVINCE.	DIVISION.	RAINFALL DATA FOR WEEK ENDING JULY 29TH, 1889.			RAINFALL DATA FROM MAY 13TH TO JULY 29TH, 1889.		
		Average Actual Rainfall of Division.	Average Nor- mal Rainfall of Division.	Excess or Defect, in inches.	Average Actual Rainfall of Season to date.	Average Nor- mal Rainfall, May 13th to July 29th.	Excess or De- fect of (Season- al) Rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	Per cent.
BURMAH	Tenasserim	8.89	10.25	- 1.36	91.16	95.98	- 5
	Lower Burmah	4.16	5.68	- 1.52	39.37	48.21	- 18
	Central Burmah	2.94	4.39	- 1.45	25.99	38.10	- 32
	Upper Burmah	2.53	?	?	23.27	?	?
	Arakan	11.50	12.60	- 1.10	91.98	110.07	- 16
BENGAL AND ASSAM	Eastern Bengal	6.43	5.18	+ 1.25	38.53	43.18	- 11
	Assam (Surma)	12.34	4.42	+ 7.92	71.17	52.32	+ 36
	Do. (Brahmaputra)	5.79	3.09	+ 2.70	45.77	38.87	+ 17
	Deltaic Bengal	3.18	3.34	- 0.16	25.02	25.19	- 1
	Central Bengal	4.05	3.06	+ 1.99	27.83	24.42	+ 14
	North Bengal	10.96	3.84	+ 7.12	59.92	50.59	+ 18
	Orissa	1.89	2.89	- 1.00	22.40	22.73	- 1
	Chota Nagpur	4.75	3.54	+ 1.21	24.08	21.82	+ 10
	Behar (South)	4.02	3.68	+ 0.34	20.29	18.45	+ 10
	Do. (North)	6.45	2.98	+ 3.47	28.14	21.79	+ 29
NORTH - WESTERN PROVINCES AND OUDH.	North - Western Provinces (East).	4.32	3.24	+ 1.08	19.74	15.86	+ 24
	Oudh (South)	4.79	2.75	+ 2.04	21.13	15.30	+ 38
	Do. (North)	8.14	2.69	+ 5.45	22.77	17.61	+ 29
	North - Western Provinces (Central).	0.81	2.98	- 2.17	12.26	13.00	- 6
	North - Western Provinces (West).	0.28	2.76	- 2.48	8.83	13.12	- 33
	North - Western Provinces (Submontane).	5.86	3.22	+ 2.64	25.18	19.29	+ 31
PUNJAB	Punjab (South)	0.03	1.01	- 0.98	5.85	6.66	- 12
	Do. (Central)	0.06	1.78	- 1.72	7.35	11.21	- 34
	Do. (Submontane)	0.86	2.49	- 1.63	10.88	12.87	- 15
	Do. (Hill Districts)	14.64	4.46	+ 10.18	36.86	27.48	+ 34
	Do. (North-West)	0.40	1.92	- 1.52	8.14	9.24	- 12
	Do. (West)	0.05	0.67	- 0.62	3.30	3.51	- 6
BOMBAY AND MALA- BAR COAST DIS- TRICTS (MADRAS).	Malabar	4.40	5.52	- 1.12	65.35	70.66	- 8
	Madras (South Central)	2.16	0.56	+ 1.60	15.30	7.17	+ 113
	Coorg	2.39	8.15	- 5.76	51.24	52.83	- 3
	Mysore	1.48	2.34	- 0.86	15.58	18.00	- 13
	Konkan	3.96	5.86	- 1.90	83.32	60.61	+ 37
	Bombay Deccan	0.78	2.03	- 1.25	13.38	15.77	- 15
	Hyderabad (North)	...	...	...	...	...	...
	Khandeish	0.39	0.87	- 0.48	8.83	11.25	- 21
CENTRAL PROVINCES AND BERAR.	Berar	1.00	1.63	- 0.63	17.04	16.29	+ 5
	Central Provinces (West)	1.13	3.25	- 2.12	18.76	19.72	- 5
	Ditto (Central)	1.34	4.34	- 3.00	23.11	26.08	- 11
	Ditto (East)	2.76	2.95	- 0.19	20.68	23.53	- 12
BOMBAY (NORTH)	Guzerat	0.86	3.03	- 2.17	21.34	19.66	+ 9
	Kattiawar	0.49	1.76	- 1.27	19.80	14.57	+ 36
	Sind	0.01	0.37	- 0.36	0.72	1.88	- 62
RAJPUTANA AND CEN- TRAL INDIA.	Central India (East)	0.35	2.80	- 2.45	14.82	17.22	- 14
	Rajputana (East), Central India (West).	0.59	2.01	- 1.42	12.24	11.90	+ 3
	Rajputana (West)	0	0.69	- 0.69	4.10	5.15	- 20
MADRAS	East Coast (North)	1.35	1.15	+ 0.20	15.19	12.48	+ 22
	East Coast (North) (a)	1.90	3.04	- 1.14	11.04	12.49	- 12
	Hyderabad (South)	0.62	0.95	- 0.33	8.68	9.65	- 10
	Madras (Central)	0.98	0.84	+ 0.14	8.75	7.24	+ 21
	East Coast (Central)	0.40	0.92	- 0.52	7.98	7.72	+ 3
	Ditto (South)	3.12	0.55	+ 2.57	8.28	5.56	+ 49
	Madras (South)	0.65	0.30	+ 0.35	2.97	3.29	- 10

W. L. DALLAS,

SIMLA, 1st August, 1889.

Assistant Meteorological Reporter to the
Government of India.

E. C. BUCK,

Secretary to the Government of India.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

Weekly Report on the State of the Season and Prospects of the Crops.

Madras.—*For week ending 27th July.*—Rainfall general; good in twelve districts, slight in Kistna, Nellore, Bellary, Anantapur, Madras, Tinnevely; fair in Godavari, Chingleput, North Arcot, Madura, and Coimbatore. Crops generally good, but withering in parts of Tinnevely and Coimbatore; damaged by excessive moisture in Vizagapatam; affected by insects or disease in Bellary, Coimbatore, and South Canara. Water-supply insufficient in parts of Chingleput, Tinnevely, Coimbatore, and Salem. Stock suffering badly, chiefly from rinderpest, in Malabar and Tanjore. Prices rising in ten districts, falling in five, and stationary in others. Prices of *ragi* fell and of other grains rose in Ganjam. Cholera abating in Ganjam and Vizagapatam, but still bad there and in Godavari. Labourers employed last day of week,—on Rushikulya works, 2,991; Gopalpur Canal, 1,396; Ghat Roads, 1,236; drinking-water tanks and wells, 3,850; minor irrigation and other works, 3,746. Number on village relief on 20th July, 69,521; fed in kitchens, 11,377; total 80,898, of whom 48,990 were children. Imports during week by sea and land, 824 tons. General prospects favourable and greatly improved in Ganjam.

Bombay.—*For week ending 31st July.*—Rain during week general; total fall insufficient for sowing in parts of Nasik, Poona, Ahmednagar, Satara, Belgaum, Dharwar, and Ahmedabad. Young crops suffering for want of moisture in parts of Poona and Ahmednagar, and damaged by floods in parts of Karachi and Shikarpur, by locusts and breaches in canals in parts of Hyderabad, and by caterpillars in parts of Kaira and Kathiawar. Standing crops otherwise good, except in Dharwar and three talukas of Khandesh, where they are middling. Sowing and transplantation progressing generally. Fodder scarce in parts of Karachi, Hyderabad, Nasik, Poona, Ahmednagar, and Dharwar. Water scarce in parts of Upper Sind Frontier, Ahmednagar, and Dharwar. Prices rising in one taluka of Nasik.

Bengal.—*For week ending 30th July.*—General rain during the week, the falls have been particularly heavy in North-East Bengal and North Behar. Transplanting of the winter rice seedlings is now making good progress everywhere, but more rain is still wanted in places in the Burdwan and Chota Nagpur divisions and the Balasore district. All autumn crops and sugarcane are doing well. In North and East Bengal early rice and jute are being harvested, and the outturn in some districts is reported to be below the average. In Chumparun the *bhadoi* crops have been considerably damaged by excessive rain and floods; loss of these crops by floods is also apprehended in Purneah, Bhagulpur, and Maldah. Food stocks are sufficient throughout the affected tract in the Patna division. In Muzaffarpur and Chumparun all relief works are closed, but gratuitous relief is being given. In Durbhanga the attendance on relief works has fallen from 8,968 to 5,673. In Chumparun prices have risen and paupers are increasing on account of the floods.

North-Western Provinces and Oudh.—*For week ending 31st July.*—The weather continues seasonable with average rain generally. *Kharif* crops are doing well. Markets are well supplied and prices steady.

Punjab.—*For week ending 31st July.*—Slight rain has fallen in Umballa, Jullundur, Amritsar, Rawalpindi, and Dera Ismail Khan. Prices rising in Delhi, Ferozepore, and Rawalpindi; falling in Shahpur, and stationary elsewhere. Ploughings for and sowings of *kharif* crops are still in progress. Standing crops are in good condition, except in Delhi. Prospects are discouraging in Peshawar for want of rain. More rain wanted in Hissar, Delhi, Lahore, and

Shahpur. Stock cattle are generally healthy. Fodder sufficient, except in Hissar.

Central Provinces.—*For week ending 31st July.*—Weather cloudy, with showers occasionally. Young crops are in good condition, but more rain is required, especially for rice. Ground being prepared for winter sowing.

Burma.—*For week ending 27th July.*—Seasonable rain fell during the week throughout Lower Burma, but more rain is wanted in North Tharrawaddy, Prome, Shwegyin, and Toungoo. In Upper Burma heavy rain fell in Bhamo, Ruby Mines, and Upper Chindwin districts, and moderate rain in Yamethin and Pyinmana, but elsewhere little or no rain fell; and in Shwebo, Kyaukse, Minbu, and Meiktila the want of rain is likely to affect the crops. In Lower Burma the price of paddy has risen slightly in Henzada and Rangoon. In Upper Burma prices have risen 25 per cent. in the Ruby Mines, 9 per cent. in Lower Chindwin, 5 per cent. in Pakokku. Prices have fallen 5 per cent. in Tharrawaddy and Minbu and 3 per cent. in Mandalay; elsewhere prices are stationary. The food-supply is sufficient.

Assam.—*For week ending 31st July.*—Rain in all districts from 0·68 to 8·56 inches. Lands in Goalpara, Sibsagar, and plains portion of Garo Hills submerged. Reaping of early and transplanting of late rice continue. Tea blight in Cachar.

Mysore and Coorg.—*For week ending 31st July.*—Rainfall good in the Shimoga and Kadur districts of Mysore, and fair elsewhere. Crops good. Paddy and sugarcane harvested in parts, and coffee transplanted in Manjarabad taluk. Prospects fair, but more rain wanted for crops in parts of the Kolar and Mysore districts. Prices fallen in Bangalore, Tumkur, and Mysore districts.

Good rain in Coorg. Coffee and rice crops in good condition. Prices have risen slightly.

Berar and Hyderabad.—*For week ending 31st July.*—Rainfall average. Weeding operations continue. Cotton and *jowari* plants in good condition. Fodder sufficient. No change in prices of food-grains. Agricultural stock good.

Slight rain in Hyderabad during the week. *Kharif* and *abi* crops thriving. Weeding of crops continues. Water in tanks insufficient. Prices stationary.

Central India.—*For week ending 31st July.*—Rainfall slight in Central India during the week; none in Gwalior and Goona. Standing crops in Goona suffering slightly for want of rain. Crops in Bhopawar Agency are reported to be doing well, and prospects are good. Prices of food-grains falling in Bundelkhund, Western Malwa, and Neemuch.

Rajputana.—*For week ending 31st July.*—Rainfall slight generally. Good in Pertabgarh. Agricultural operations satisfactory. Standing crops are in want of rain in Marwar, Kerowlee, and Bhurtpore. Agricultural stock good. Pasturage or fodder sufficient, except in parts of Ulwar and Marwar. Prices rising in Kerowlee.

Nepal.—*For week ending 25th July.*—Sufficient rain. Weather hot. Agricultural prospects good. Transplantation of winter rice completed. More rain still required for the upland rice.

E. C. BUCK,
Secretary to the Government of India.

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
RAILWAY TRAFFIC.

No. XIV. OF 1889-90.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used as far as possible.

Latest Return received.	RAILWAYS.	WEEK ENDING 7TH JULY, 1888.		WEEK ENDING 6TH JULY, 1889.		TOTAL RECEIPTS FROM 1ST APRIL TO 7TH JULY, 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 6TH JULY, 1889.		Total increase in 1889-90.	Total decrease in 1889-90.		
		Total mean length open.	Receipts.		Total mean length open.	Receipts.		Total.	Per mile open per week.			Total.	Per mile open per week.
			Total.	Per mile open.		Total.	Per mile open.						
			Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		
<i>State Lines worked by Companies.</i>													
20th July, 1889	East Indian	1,514	6,68,648	442	1,514	7,88,712	521	1,25,77,479	593	1,27,11,231	606	1,33,752	
20th ditto	Patna-Gya.	57	5,991	105	57	8,103	142	1,19,914	150	1,20,277	153	363	
20th ditto	Dildarnagar-Ghazipur	12	653	54	12	768	64	10,525	98	14,148	85	2,377	
13th ditto	Sindia	75	7,477	100	(a)	...	...	1,14,341	109	(a)	...	1,14,341
13th ditto	Rajputana-Malwa	1,664	3,12,469	188	1,664	3,60,000	216	55,90,442	240	62,77,891	272	6,87,449	
13th ditto	Bengal-Nagpur (b)	186	14,964	80	305	(c) 28,149	92	5,33,197	205	(c) 6,29,300	153	96,103	
13th ditto	Southern Maratha (d)	850	73,838	87	857	76,324	89	11,28,972	95	12,53,893	105	1,24,921	
13th ditto	Do. Mysore Section	140	10,535	75	219	14,268	65	1,47,183	75	2,02,463	66	55,280	
13th ditto	Indian Midland	136	11,697	86	668	(e) 46,886	70	2,35,312	123	(e) 8,54,155	101	6,18,843	
13th ditto	Vilupuram-Dhar m a - veram (Nellore Branch)	83	4,281	52	83	5,169	62	72,812	63	69,975	61	2,837	
First 13 days of July, 1889	Bareilly-Pilibhit	36	1,079	29	36	1,573	44	22,727	45	29,840	60	7,113	
TOTAL		4,753	11,11,632	234	5,415	13,29,952	246	2,05,58,904	309	2,21,63,173	299	16,04,269	
<i>State Lines worked by Government.</i>													
20th July, 1889	North Western (f)	2,411	4,05,469	168	2,386	6,36,854	267	66,68,325	198	75,65,576	229	8,97,251	
13th ditto	Oudh and Rohilkhand	692	96,234	139	692	1,39,230	201	22,09,165	228	24,07,003	248	1,97,838	
13th ditto	Bengal Central	125	11,410	91	125	12,631	101	1,73,211	99	1,95,100	113	21,889	
13th ditto	Wardha Coal	45	11,839	263	45	25,158	559	2,08,749	331	2,43,428	390	34,679	
13th ditto	Eastern Bengal Railways	673	1,24,256	185	747	1,51,177	202	20,79,727	221	22,49,188	237	1,69,461	
20th ditto	Nalhati	27	1,542	57	27	1,846	68	27,971	74	26,213	70	1,758	
20th ditto	Tirhoot	259	27,271	105	273	36,534	134	5,24,910	145	5,46,654	144	21,744	
13th ditto	Lucknow-Sitapur-Sihramau	105	3,442	33	105	7,104	68	78,549	53	1,01,023	69	22,474	
13th ditto	Jorhat	25	1,240	50	25	1,131	45	14,798	36	15,495	37	697	
6th ditto	Cherra-Companyganj	...	(g)	...	7	187	27	1,140	11	1,420	13	286	
6th ditto	Burma	392	48,758	124	533	88,308	160	8,80,133	168	13,56,548	175	4,76,415	
TOTAL		4,754	7,31,461	154	4,985	11,00,160	221	1,28,66,678	194	1,47,07,654	216	18,40,976	
<i>Lines worked by Guaranteed Companies.</i>													
13th July, 1889	Madras	840	1,58,023	188	840	1,81,109	216	23,13,076	197	25,71,720	221	2,58,644	
13th ditto	South Indian	654	1,05,460	161	654	1,35,205	207	15,55,059	170	16,46,997	182	91,938	
13th ditto	Great Indian Peninsula	1,497	(h) 4,83,875	323	1,440	(i) 5,36,514	373	1,42,25,857	676	1,10,21,230	550	32,04,627	
13th ditto	Bombay, Baroda and Central India (j)	461	1,56,206	339	461	2,00,000	434	40,91,142	634	42,17,532	660	1,26,390	
TOTAL		3,452	9,03,564	262	3,395	10,52,888	310	2,21,85,134	459	1,94,57,479	414	27,27,655	
GRAND TOTAL (GUARANTEED AND STATE)													
		12,959	27,46,657	212	13,795	34,83,000	252	5,56,10,716	307	5,63,28,306	298	7,17,590	
GROSS ESTIMATED EXPENSES		...	...	...	...	...	...	2,68,15,702	148	2,71,41,311	144	3,25,609
NET RECEIPTS		...	...	...	...	...	...	2,87,95,014	159	2,91,86,995	154	3,91,981
<i>Assisted Companies.</i>													
20th July, 1889	Tarakeshwar	22	4,732	215	22	5,353	243	88,080	286	88,292	290	212	
Last 8 days ending 30th June, 1889.	Dibru-Sadiya	...	...	...	...	(k)	...	(l) 1,09,099	108	(m) 1,25,590	124	16,491
20th July, 1889	Bengal and North-Western	376	35,282	94	376	50,087	133	8,03,633	153	8,33,002	160	29,369	
First 13 days of July, 1889	Rohilkhand-Kumaun	67	6,950	104	67	7,742	116	1,07,585	115	1,16,694	126	9,109	
TOTAL		465	46,964	101	465	63,182	136	11,08,397	146	11,63,578	155	55,181	
<i>Native States.</i>													
13th July, 1889	His Highness the Nizam's Guaranteed Company	277	20,598	74	354	44,294	125	4,25,608	110	5,77,845	118	1,52,237	
13th ditto	His Highness the Gaekwar's	59	1,469	25	59	2,510	43	45,872	56	41,606	51	4,266	
13th ditto	His Highness the Gaekwar's Veramgam-Mehsana-Vadnagar	21	632	30	27	1,000	37	15,023	51	17,671	47	2,648	
13th ditto	Bhavnagar-Gondal-Junagarh-Porbandar	193	13,724	71	260	23,292	90	3,31,359	123	4,66,371	129	1,35,012	
13th ditto	Morvi	68	2,097	31	68	3,313	49	62,592	66	70,428	74	7,836	
13th ditto	Jodhpore	124	8,203	66	124	7,200	58	1,15,038	66	1,00,464	62	8,574	
TOTAL		742	46,723	63	892	81,609	92	9,95,492	96	12,80,385	104	2,84,893	

- (a) Included with the Indian Midland Railway.
(b) Includes the Katni-Umaria Branch.
(c) Includes Sanctoria Coal Section of the Bengal-Nagpur Railway.
(d) Includes the Bellary-Kistna State Railway.
(e) Includes the Sindia and Bhopal-Itarsi State Railways.
(f) Includes the Amritsar-Pathankot and Rajpura-Bhatinda State Railways.
(g) Traffic stopped on account of breach of line.

- (h) Includes the Dhond-Mánmád, Khámgaon, Amráoti, and Bhopal-Itarsi State Railways.
(i) Includes the Dhond-Mánmád, Khámgaon, and Amráoti State Railways.
(j) Includes the Patri Branch.
(k) Return not received.
(l) Total receipts from 1st April to 30th June, 1888.
(m) Total receipts from 1st April to 30th June, 1889.

SIMLA, 1st August, 1889.

M. C. BRACKENBURY, Major, R.E.,
Under Secretary.

Printed and Published for the GOVERNMENT

OF INDIA at the GOVERNMENT CENTRAL PRESS, Simla.



SUPPLEMENT TO
The Gazette of India.

No. 32.} CALCUTTA, SATURDAY, AUGUST 10, 1889.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.

Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of five Rupees per annum if delivered in Calcutta, or eight Rupees if sent by Post. The SUPPLEMENT and PART VI of the GAZETTE can also be subscribed for separately on a payment of Rupees six per annum if delivered in Calcutta or Rupees nine if sent by Post.

No Official Orders or Notifications, the Publication of which in the GAZETTE OF INDIA is required by Law, or which it has been customary to publish in the CALCUTTA GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be looked to.

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
RAILWAY TRAFFIC.

GENERAL RULES FOR WORKING INDIAN RAILWAYS.

No. 353 R. T., dated Simla, the 23rd July 1889.

RESOLUTION—By the Government of India, Public Works Department.

Read again—

Section 8 of Act IV (the Indian Railway Act) of 1879.

Public Works Department Notification No. 299, dated 13th September 1880 (publishing the General Rules for all Railways in India) and Public Works Department Circular No. 17 Railway, dated 21st August 1880.

Notification by the Government of India, in the Foreign Department, No. 4587-I., dated 21st October 1887.

Read also—

Letter from the Consulting Engineer to the Government of India for Railways, Central Division, No. 1479-T., dated 4th July 1889, and enclosure.

OBSERVATIONS.—In accordance with the provisions of Section 8 of the Indian Railway Act, IV of 1879, as extended, by the Notification of the Government of India in the Foreign Department read above, to the lands occupied by the Bhopal State Railway in the territories of Her Highness the Begum of Bhopal, the Agent and Chief Engineer of the Indian Midland Railway Company has applied that the General Rules for Indian Railways, which have received the sanction of the Governor General in Council and were published in the *Gazette of India*, dated 18th September 1880, may be applied to the Bhopal State Railway, now worked by that Company, with the exception of Section XVII, which

refers to the working of a single line of railway on the system termed "Train Despatching" in rule 3 of the said Rules, and of Rules 342 and 343 which he requests may be modified so as to read as follows:—

"No. 342.—No engine or train shall be moved from any station until the Driver has in his possession a "Line Clear," "Caution Message," or other permission written on the authorised form showing that he can proceed to the next station. The Driver is to receive this written permission from no other person than the Guard of his own train, or from the Station Master, or from one of the Station staff duly authorised for such duty, but on all occasions when the Guard does not personally deliver the permission to the Driver, it must be countersigned by the Guard before delivery to the Driver. The Driver must also receive from the Guard the usual starting signal before moving.

When a train is arranged to run through a station without stopping, the written permission to proceed to the next station may be handed to the Driver direct by the Station Master or other authorised person of the Station staff, and a duplicate of it handed to the Guard in the same manner.

"No. 343.—The Station Master, or other authorised person of the Station staff, is to hand the written permission to the Guard, who must satisfy himself that it is properly filled up and dated, with the time added, and is signed in full and in ink, and that it applies to the particular train or engine for which it is given and received, before handing it to the Driver. The Driver must also satisfy himself on these points before starting.

This written permission is never to be given to the Driver until the train is to start; and when waiting to pass another train, it must not be given to the Driver until the whole of such other train has come in and is clear of the points.

When a train is not timed to stop at a station, and the written permission is handed both to the Driver and Guard of the train, the Station Master will be held wholly responsible that it applies to the particular train or engine for which it is given, and that it is properly filled up and dated, with the time added, and is signed in full and in ink."

RESOLUTION.—With Rules 342 and 343 altered as proposed, and with the exception of Section XVII which refers to the working of a single line of railway on the system termed in Rule 3 of the said Rules "Train Despatching," the Governor General in Council is pleased, under Section 8 of the said Act as so extended, to sanction the application to the Bhopal State Railway of the General Rules for Indian Railways as published in the *Gazette of India*, dated 18th September 1880.

ORDER.—Ordered that the General Rules, which have been published in the *Gazette of India*, be further notified to the Railway servants and the public by a copy thereof [with the exception and alterations noted] and of this Resolution being kept open to inspection, free of any charge, in the office of the Station Master of every station on the said Railway.

Ordered also, that this Resolution be communicated to the Consulting Engineer to the Government of India for Railways, Central Division, for information and guidance, with reference to his letter No. 1479-T., dated 4th July 1889; and that it be published in the *Gazette of India*.

M. C. BRACKENBURY, Major, R. E.,
Under-Secretary.

Documents accompanying.

Nil.

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
CIVIL WORKS—Irrigation.

STATEMENTS OF IRRIGATION OPERATIONS IN BENGAL FOR THE KHARIF SEASON OF 1888.

GOVERNMENT OF BENGAL, PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH.

IRRIGATION OPERATIONS FOR THE KHARIF SEASON, 1888-89.
Comparative Statement of Irrigation and Rain-fall in Canal Districts of Bengal.

No. 1.—KHARIF STATEMENT.

DISTRICT.	Area in acres.	Culturable, acres.	AREA IRRIGATED.		1888-89 AS COMPARED WITH 1887-88.		RAINFALL FOR FOUR MONTHS.												REMARKS.	
			1887-88.	1888-89.	Increase.	Decrease.	JULY.		AUGUST.		SEPTEMBER.		OCTOBER.		TOTAL.					
							1887.	1888.	1887.	1888.	1887.	1888.	1887.	1888.	1887.	1888.				
Cuttack	.	.	Acres.	Acres.	...	...	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
Balasore	.	.	89,167	129,631	40,464	...	11'43	8'87	7'95	21'05	6'55	8'42	2'79	1'04	28'75	39'18	40'04	38'73	51'42	...
Midnapore	.	.	9,710	23,578	13,868	...	12'83	14'14	11'19	21'36	3'92	8'03	2'20	1'50	30'14	40'04	38'73	51'42	...	
Hooghly	.	.	64,885	54,551	...	10,334	17'74	21'30	10'19	21'96	7'56	7'37	3'24	0'79	...	...	...	...	...	...
Gya	.	.	547	502	...	45	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pana.	.	.	29,348*	27,600	...	1,748	6'75	16'06	6'30	21'50	3'95	7'40	3'30	Nil	20'30	44'96	20'30	44'96	...	...
Shahabad	.	.	25,409*	28,146	...	...	8'64	18'13	5'25	14'23	3'51	4'59	3'20	Nil.	20'60	36'95	20'60	36'95	...	...
Sarun.	.	.	204,533*	206,929	...	2,396	7'29	17'00	5'93	17'74	5'96	5'58	5'89	0'43	25'07	41'65	25'07	41'65	...	...
	.	.	1,904†	5,839	...	3,935	8'35	11'79	9'82	11'44	9'07	7'18	5'53	...	32'77	30'41	32'77	30'41	...	...
		11'40	14'43	6'95	12'32	2'88	5'34	4'95	...	26'18	32'09	26'18	32'09	...	...
TOTAL	425,503	476,776	63,400	12,127	...	...	...	...	...	...	...	...	...	...	...	...	...	...

NOTE.—The figures for 1887-88 as now given are correct.
* Include 13,855 acres not weather irrigation.
† Includes 205 acres indigo irrigation.

NET INCREASE, 51,273

G. A. G. SHAW, E.
Under-Secy. to the Govt. of Bengal.

CALCUTTA,
The 21st June 1889.

GOVERNMENT OF BENGAL, PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH.

IRRIGATION OPERATIONS OF FASL KHARIF, 1888-89.

Statement in acres of crops irrigated in Canal Districts.

No. II.—KHARIF STATEMENT.

NATURE OF CROPS.	Cuttack.	Balasore.	Midnapore.	Hooghly.	Gya.	Patna.	Shahabad.	Sarun.	TOTAL.
Garden and orchards	2,560	1,614	18,938	8	23,120
Sugarcane
Wheat
Barley
Rice	129,631	23,578	54,551	502	24,790	26,485	175,820	5,674	441,031
Miscellaneous	250	47	402	123	822
Gram, &c.
Miscellaneous (bhadoi)
Fodder crops
Fibres
Cotton
Indigo	34	34
Turmeric, &c.
Opium
Tobacco, &c.
Mustard, &c.
Castor
Oilseeds
Miscellaneous
Hot-weather
TOTAL, 1888-89	129,631	23,578	54,551	502	27,600	28,146	206,929	5,839	476,776
TOTAL, 1887-88	89,167	9,710	64,885	547	29,348	25,409	204,533	1,904	425,503

CALCUTTA,
The 21st June 1889.

G. A. G. SHAWEE,
Under-Secy. to the Govt. of Bengal.

GOVERNMENT OF BENGAL, PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH.

IRRIGATION OPERATIONS OF FASL KHARIF, 1888-89.
Statement in acres of crops irrigated by Canals in Canal Divisions.

NO. III.—KHARIF STATEMENT.

NATURE OF CROPS.	TALDUNDA CANAL.	KENDRAPARA CANAL.	HIGH LEVEL CANAL, RANGE I.	HIGH LEVEL CANAL, RANGE II.	HIGH LEVEL CANAL, RANGE III.	MIDNAPORE CANAL.	PATNA CANAL.	ARRAH CANAL.	BUXAR CANAL.	SARUN CANAL.	TOTAL.	REMARKS.
	Mahanuddy.	Brahminee-Byturnee.	Acquapadda-Jajepore.			Cossye.	Eastern Sone.	Arrah.	Buxar.	Gunduck.		
Garden and orchards
Sugarcane
Wheat
Barley
Cereals
Rice	41,339	86,278	...	25,592	...	55,053	51,275	1,13,006	62,814	5,674	441,031	...
Miscellaneous (bhadoi)	297	99	303	123	822	...
Gram, &c.
Miscellaneous
Fodder crops
Grass, Lucerne
Fibres
Cotton
Indigo
Turneric, &c.
Opium
Drugs
Tobacco, &c.
Mustard, &c.
Castor
Oilseeds
Miscellaneous
Hot-weather
TOTAL, 1889-89	41,339	86,278	...	25,592	...	55,053	55,746	1,34,463	72,466	5,839	476,776	...
TOTAL, 1887-88	26,688	60,963	...	11,226	...	65,432	54,757	1,22,287	82,246	1,904	425,503	...

CALCUTTA,
The 21st June 1889.G. A. G. SHAWE,
Under-Secy. to the Govt. of Bengal.

GOVERNMENT OF INDIA.
HOME DEPARTMENT.

EXCLUSION OF CERTAIN OFFICES FROM THE OPERATION OF THE RULES FOR
THE REGULATION OF APPOINTMENTS IN THE SECRETARIAT CLERICAL
SERVICE OF THE GOVERNMENT OF INDIA.

No. $\frac{22}{1368-82}$.

*Extract from the Proceedings of the Government of India in the Home
Department (Public),—under date Simla, the 5th August, 1889.*

Read—

Home Department Resolution No. 1817, dated the 3rd July 1888.

Home Department Resolution No. 39-2970-84, dated the 13th November 1888.

RESOLUTION.

In modification of the rules for the regulation of appointments in the Secretariat clerical service of the Government of India and attached Offices, published in the Resolution of the 3rd July 1888, the Governor-General in Council is pleased to direct that these rules shall not apply to the Traffic and Statistical Sections of the Railway Branch of the Public Works Secretariat and the Offices of Consulting Engineers to the Government of India for Railways, when these Sections and Offices fill vacancies by recruitment of Officers already serving in the Offices of Traffic Superintendents and District Officers on State lines. When recruitment is not effected in this way, the rules will apply.

ORDER.—Ordered, that a copy of this Resolution be forwarded to all Departments of the Government of India; to the Heads* of Offices under the Home Department; to the Governments of Bengal, North-Western Provinces and Oudh, and the Punjab; and Chief Commissioner, Central Provinces; and to the Secretary to the Board of Examiners, Calcutta, for information, in continuation of Home Department communications Nos. 39-2970-84, dated the 13th November 1888.

Ordered also, that the Resolution be published in the *Gazette of India* for general information.

[True Extract.]

A. P. MACDONNELL,
Secretary to the Government of India.

GOVERNMENT OF INDIA.
HOME DEPARTMENT.

EXECUTION OF DEEDS, CONTRACTS, &c., ON BEHALF OF THE SECRETARY
OF STATE.

No. 1071—72.

*Extract from the Proceedings of the Government of India in the Home
Department (Judicial),—under date Simla, the 9th August, 1889.*

Read—

A communication from the Public Works Department, No. 1944-G., dated 6th July
1889.

RESOLUTION.

In exercise of the power conferred by the thirty-third and thirty-fourth of
Vict. Cap. fifty-nine, section two, the Governor-General in Council is pleased to
declare that the undermentioned class of instruments referred to in the twenty-
second and twenty-third of Vict. Cap. forty-one, section two, may be executed
by the Director, North-Western Railway :

Agreements with Covenanted Engine Drivers on the expiry of the term of their origi-
nal covenants.

ORDER.—Ordered, that this Resolution be communicated to the Public
Works Department, and be published in the Supplement to the *Gazette of
India*.

[True Extract.]

A. P. MACDONNELL,

Secretary to the Government of India.

GOVERNMENT OF INDIA.
HOME DEPARTMENT.

TRANSMISSION OF MARRIAGE RETURNS BY REGISTRARS APPOINTED UNDER
ACTS III. OF 1872 AND XV. OF 1865 TO REGISTRARS GENERAL OF
BIRTHS, DEATHS AND MARRIAGES UNDER
ACT VI. OF 1886.

No. $\frac{6}{1074-85}$.

Extract from the Proceedings of the Government of India in the Home Department (Judicial),—under date Simla, the 9th August, 1889.

Read—

The undermentioned letters on the subject of the transmission of Marriage Returns by Registrars appointed under Acts III. of 1872 and XV. of 1865 to Registrars General of Births, Deaths and Marriages under Act VI. of 1886:

From the Government of Bombay, No. 2502, dated 27th June 1889.

From the Government of the Punjab, No. 165S., dated 1st July 1889.

RESOLUTION.

In exercise of the powers conferred by section 13A. of Act III. of 1872 (*to provide a form of marriage in certain cases*), and section 8A. of the Parsi Marriage and Divorce Act, 1865, the Governor-General in Council is pleased to issue the following orders.

Copies of entries in the Marriage Certificate Book prescribed in section 13 of Act III. of 1872 and in the Register of Marriages referred to in section 6 of the

* Except the Registrar appointed by the Chief Justice of the High Court of Judicature at Bombay under Act XV. of 1865.

Parsi Marriage and Divorce Act, 1865, which Registrars* under these Acts are required to send to the Registrars General of Births, Deaths and Marriages appointed under the Births, Deaths and Marriages Registration Act, 1886, shall be certified in the form set forth in the following schedule, and shall be sent at intervals of three months, on or as nearly as possible after the 1st January, April, July, and October in each year.

Should no entries be made in a Marriage Certificate Book, or a Register of Marriages, as the case may be, during the preceding three months, a certificate to this effect shall be sent to the Registrar General concerned.

SCHEDULE.

Form of Certificate of truth of copies of entries in Marriage Certificate Book under Act III. of 1872 [or Register of Marriages under the Parsi Marriage and Divorce Act, 1865, as the case may be] to be sent to Registrar General.

Certified that the above, which contains entries from No. _____ regarding _____ to No. _____ regarding _____, is a true copy of all the entries in the Marriage Certificate Book under Act III. of 1872 (or Register of Marriages under Act XV. of 1865, *as the case may be*) kept by me for the three months ending the _____ day of _____ 18 _____.

Dated the _____ of _____

(Signature.)

Registrar of Marriages under Act III. of 1872 (or Registrar under the Parsi Marriage and Divorce Act, 1865, *as the case may be*) for (local area).

ORDER.—Ordered, that the above Resolution be communicated to Local Governments and Administrations, and to the Foreign Department.

Ordered also, that it be published in the Supplement to the *Gazette of India*.

[True Extract.]

A. P. MACDONNELL,

Secretary to the Government of India.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

**Weather Review of India for the week ending at 8 a.m. on
Monday, August 5th, 1889.**

The quiet undisturbed weather which prevailed during last week has continued during the week under review. The monsoon on both sides of India has been moderate in force, and except quite at the close of the week there has been no storm in any part of the Indian region. Owing to this and to the absence of any exceptional strength in the monsoon currents, the rainfall, though fairly steady and continuous, has been generally moderate or light. In North-Western India, including the Punjab, Rajputana, and Sind, there has been a break in the rains during the greater part of the week.

The chart of the 30th July exhibited normal monsoon conditions, except that a very slight depression existed in the neighbourhood of Allahabad. Gradients were somewhat slighter than is ordinarily the case, so that, though winds from the usual monsoon directions prevailed in most parts of India, in the south of the Peninsula calms and variable breezes were reported. On the morning of the 31st a well marked depression was shown over Sind, while that reported from Allahabad on the previous day had disappeared. These were the only important changes in pressure. Gradients had become somewhat steep over Sind and Guzerat, and the monsoon in that part of India was blowing freshly. Elsewhere the winds were moderate generally, but in the south of the Peninsula and over the Gangetic plain light variable breezes prevailed. The chart of the 1st showed that the depression over Sind had largely filled up, and that considering the time of year, pressure was generally uniform and the winds light in force. On the 2nd, owing to a general barometric fall in the North and a rise in the South, gradients had increased. Monsoon winds of normal direction and force consequently again prevailed over the greater part of India, the only exception being in the Gangetic plain, where variable airs and calms were still reported. The reports of the 3rd showed a further fall of pressure over Northern and Central India, and a further rise in the south of the Peninsula. Depressions had formed over the Indus Valley and over Bengal, and a difference of over four-tenths of an inch of pressure existed between these regions and the south of the Bay. On the 4th there was very little change, except that the barometric fall had extended to the south of the Peninsula, and that a slight recovery had commenced in North Bengal and Assam. On the 5th the observations showed that a small shallow storm had formed over the head of the Bay. Otherwise there had been little change.

Throughout the whole of the past week the distribution of pressure over Northern India has, notwithstanding daily oscillations, exhibited one constant characteristic, *viz.*, low pressures over the Indus Valley and over Bengal, with an intervening shoulder of higher pressure over Rajputana, the east of the Punjab, and the west of the North-Western Provinces. This shoulder of high pressure appears to act as a barrier to the free extension of the monsoon currents into Upper India, and hence the region lying to the west or north-west of it experiences deficient rainfall.

Temperature has been high for the time of year over nearly the whole of India. Over Burma, Bengal, Bombay, the central parts of the country, Guzerat, Sind, and Rajputana the average mean temperature has exceeded the normal on all days; but in the Punjab, the North-Western Provinces, and Madras the mean temperature has been subject to considerable fluctuations from day to day. On the last day of the week the temperature exceeded the normal in all Provinces. The maxima in North-Western India have undergone large fluctuations during the week; but at the close they were generally largely above the average, a reading of 109.8° being reported from Jacobabad, of 107.5° from Dera Ismail Khan, and of 106° from Multan and Peshawar.

The following table shows the excess or defect of the mean average temperature of the different Provinces for the present and for the preceding week :

PROVINCES.	Difference of Mean Temperature of Last Week from Normal.	Difference of Mean Temperature of Present Week from Normal.
Burmah	+ 0.7°	+ 1.5°
Bengal	— 0.1°	+ 0.9°
North-Western Provinces	+ 0.3°	— 1.2°
Punjab	+ 3.1°	+ 0.4°
Bombay	+ 1.3°	+ 1.8°
Central Provinces and Berar	+ 2.2°	+ 1.8°
Guzerat and Central India	+ 1.4°	+ 1.7°
Sind and Rajputana	+ 1.9°	+ 2.9°
Madras	— 0.1°	— 0.2°

This table shows that temperature relatively to the normal average has decreased considerably in the Punjab and North-Western Provinces and slightly in the Central Provinces and Berar, and that elsewhere it has risen or remained stationary.

Rain.— There has again been a partial break in the rains over a large part of North-Western India, including Sind, the west of Rajputana, and the greater part of the Punjab. This region has throughout the week been to the westward and north-westward of the shoulder of high pressure noticed in a preceding section, and the deficient rainfall of this region is probably due to its position with respect to this shoulder and to the direction of rain bearing winds.

The following is a brief description of the daily distribution of rainfall. On the 30th there was no rainfall reported in Sind, Guzerat, or the greater part of Rajputana and of the Punjab (except the hills), but there was general, though generally light, rain elsewhere. On the 31st the distribution was the same, except that there was more rain both in Rajputana and in the Punjab, a fair fall having taken place all along the line of the hills in the Punjab. On the 1st (when the monsoon was very light) the rain bearing current retreated again from the Punjab and Rajputana, and in addition there was no rain in the Deccan or the North Konkan, but elsewhere there were small amounts. On the 2nd there was general rain, except in the Punjab, Western Rajputana, and Sind. This distribution continued on the 3rd, and in a modified degree on the 4th and 5th; but on the two later dates there was no rain on the East Coast or in Rajputana.

The table at the close of the Summary shows that on the whole the rainfall of the week has been deficient. Only at twenty-one out of the fifty-one districts reporting does the week's fall exceed the average, and in most of these the excess is very small. The most general excess is reported from Behar, the North-Western Provinces, and Madras, in all of which regions the majority of places have received more than the normal amount. In Burma, with the exception of Tenasserim, and in Bengal and Assam, with the exception of the Brahmaputra, Bengal North, and the Behar divisions, all divisions report a deficiency. In the North-Western Provinces, on the contrary, Oudh South and North-Western Provinces Central are the only divisions where the rainfall is short; but in the Punjab the amounts are everywhere below the normal. In the West Coast districts Madras (South Central) and Mysore exhibit an excess; all the remainder, a deficiency. The centre and east of the Central Provinces, the east of Central India, and the east of Rajputana have had, like the North-Western Provinces, more than the usual amount of rain, but all the other central districts, as well as Sind, Kattiawar, and Guzerat, have had less. On the East Coast as mentioned above the rainfall has been heavy.

The maximum amounts were again generally unimportant. In Burma no station received more than 12 inches during the week, and in the greater part of Bengal the falls were much smaller. Cherrapunji registered only 14 inches, and the sole heavy fall in that part of India was 21½ inches at the station of Falacutta in the Jalpaiguri district. Throughout Behar and the greater part of the North-Western Provinces there were no exceptional falls, but in the sub-montane district the majority of districts report falls of between 10 and 13 inches. In the Punjab the only moderately heavy fall was 9.9 inches at Kangra. There is nothing of importance in the records of the West Coast districts or in those of the central districts of the Peninsula and of India. Fair falls are reported from all parts of the East Coast from Ganjam in the north to Madura in the south.

PROVINCE.	DIVISION.	RAINFALL DATA FOR WEEK ENDING AUGUST 5TH, 1889.			RAINFALL DATA FROM MAY 13TH TO AUGUST 5TH, 1889.		
		Average Actual Rainfall of Division.	Average Nor- mal Rainfall of Division.	Excess or Defect, in Inches.	Average Actual Rainfall of Season to date.	Average Nor- mal Rainfall, May 13th to August 5th.	Excess or De- fect of (Season- al) Rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	Per cent.
BURMAH	Tenasserim	12'63	10'58	+ 2'05	103'79	106'56	- 3
	Lower Burmah	3'98	5'04	- 1'06	39'03	53'25	- 27
	Central Burmah	2'52	4'17	- 1'65	28'50	42'28	- 33
	Upper Burmah	3'10	?	?	24'93	?	?
	Arakan	7'75	9'72	- 1'97	99'73	119'79	- 17
BENGAL AND ASSAM	Eastern Bengal	1'45	4'50	- 3'05	39'98	47'68	- 16
	Assam (Surma)	3'57	3'97	- 0'40	74'74	56'29	+ 33
	Do. (Brahmaputra)	2'95	2'52	+ 0'43	48'71	41'38	+ 18
	Deltaic Bengal	1'74	3'40	- 1'66	26'76	28'59	- 6
	Central Bengal	1'14	3'14	- 2'00	27'76	27'56	+ 1
	North Bengal	6'21	4'16	+ 2'05	66'13	54'75	+ 21
	Orissa	2'67	2'84	- 0'17	25'08	25'77	- 3
	Chota Nagpur	2'62	3'51	- 0'89	27'73	25'43	+ 9
	Behar (South)	3'14	2'57	+ 0'57	23'43	21'02	+ 11
NORTH - WESTERN PROVINCES AND OUDH.	Do. (North)	3'24	2'53	+ 0'71	30'45	24'12	+ 26
	North - Western Provinces (East).	3'00	2'87	+ 0'13	22'74	18'16	+ 25
	Oudh (South)	2'19	2'89	- 0'70	23'32	18'19	+ 28
	Do. (North)	3'49	2'72	+ 0'77	23'76	20'33	+ 17
	North - Western Provinces (Central).	1'94	2'87	- 0'93	14'20	15'87	- 11
	North - Western Provinces (West).	2'61	1'90	+ 0'71	11'70	14'62	- 20
PUNJAB	North - Western Provinces (Submontane).	5'54	3'28	+ 2'26	30'72	22'58	+ 36
	Punjab (South)	0'30	0'90	- 0'60	6'15	7'56	- 19
	Do. (Central)	0'88	1'43	- 0'55	8'23	12'03	- 35
	Do. (Submontane)	1'70	2'00	- 0'30	12'58	14'85	- 15
	Do. (Hill Districts)	5'00	7'39	- 1'79	43'14	45'05	- 6
	Do. (North-West)	0'88	1'67	- 0'79	9'08	10'92	- 17
BOMBAY AND MALA- BAR COAST DIS- TRICTS (MADRAS).	Do. (West)	0'15	0'72	- 0'57	3'52	4'22	- 17
	Malabar	2'66	4'57	- 1'91	68'03	75'23	- 10
	Madras (South Central)	1'87	0'85	+ 1'02	17'17	8'01	+ 114
	Coorg	3'35	7'68	- 4'33	54'59	60'51	- 10
	Mysore	1'42	0'96	+ 0'46	8'09	10'26	- 21
	Konkan	3'55	5'35	- 1'80	86'87	65'96	+ 32
	Bombay Deccan	0'58	1'50	- 0'92	13'96	17'27	- 19
	Hyderabad (North) . . . . .	...	...	...	...	...	...
CENTRAL PROVINCES AND BERAR.	Khandeish	0'26	0'68	- 0'42	9'09	11'93	- 24
	Berar	1'14	1'76	- 0'62	18'19	18'05	+ 1
	Central Provinces (West)	1'36	2'59	- 1'23	20'12	22'31	- 10
	Ditto (Central)	4'97	3'59	+ 1'38	28'08	29'68	- 5
BOMBAY (NORTH)	Ditto (East)	4'59	3'02	+ 1'57	28'51	28'22	+ 1
	Guzerat	0'70	1'86	- 1'16	22'05	21'52	+ 2
	Kattiawar	0'49	2'21	- 1'72	20'29	16'78	+ 21
RAJPUTANA AND CEN- TRAL INDIA.	Sind	0	0'75	- 0'75	0'72	2'63	- 73
	Central India (East)	3'35	2'76	+ 0'59	18'18	19'98	- 9
	Rajputana (East), Central India (West).	2'46	1'72	+ 0'74	14'70	13'62	+ 8
	Rajputana (West)	0'16	1'41	- 1'25	4'26	6'56	- 35
MADRAS	East Coast (North)	2'00	0'91	+ 1'09	17'19	13'39	+ 28
	East Coast (North) (a)	2'20	1'69	+ 0'51	13'24	14'17	- 7
	Hyderabad (South)	0'68	0'99	- 0'31	9'36	10'64	- 12
	Madras (Central)	0'94	0'47	+ 0'47	9'69	7'71	+ 26
	East Coast (Central)	1'17	0'64	+ 0'53	9'15	8'36	+ 9
	Ditto (South)	2'02	0'85	+ 1'17	10'30	6'41	+ 61
	Madras (South)	0'91	0'45	+ 0'46	3'88	3'74	+ 4

SIMLA, 8th August, 1889.

W. L. DALLAS,
Assistant Meteorological Reporter to the
Government of India.

E. C. BUCK,
Secretary to the Government of India.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

Weekly Report on the State of the Season and Prospects of the Crops.

Madras.—*For week ending 3rd August.*—Rainfall general; good in most districts. Crops generally good, but withering in parts of Tinnevely and Coimbatore; damaged by excessive rain in Vizagapatam and Godavari; affected by insects in Coimbatore and South Canara. Water supply insufficient in parts of Chingleput, Tinnevely, Salem, and Coimbatore. Prices rising in five districts, falling in seven, and stationary in others. Labourers employed on last day of week,—on Rushikulya works, 3,117; Gopalpore Canal, 1,382; Ghat Roads, 1,196; drinking-water tanks and wells, 1,801; minor irrigation and other works, 3,727. Number on village relief on 27th July, 70,184; fed in kitchens, 9,318. Imports during week by sea and land, 695 tons. General prospects favourable and greatly improved in Ganjam.

Bombay.—*For week ending 7th August.*—Rain during week general; more required in Nasik and parts of Guzerat, Khandesh, Poona, Ahmednagar, Satara, Bijapur, Belgaum, and Dharwar. Young crops withering for want of moisture in parts of Nasik, Poona, and Ahmednagar and damaged by floods and crabs in parts of Karachi; standing crops otherwise good, except in three talukas of Khandesh. Sowing and transplantation progressing in several districts. Preparations for late crops commenced in Sholapur, Bijapur, and Dharwar. Fodder and drinking water scarce in parts of Nasik, Ahmednagar, and Dharwar. Prices rising in one taluka of Nasik.

Bengal.—*For week ending 6th August.*—General rain fell during the week, but the fall in many districts was light and scanty. Transplanting of winter rice is proceeding, but more rain is wanted in almost all parts of the Burdwan division, in places in the Presidency division, and also in the Balasore and Hazaribagh districts. Early rice, jute, sugarcane, and *bhadoi* crops are generally doing well. In North Behar the *bhadoi* and winter rice crops have suffered from excessive rain and floods; the loss of the *bhadoi* in the Chumparun district is considerable. In North and East Bengal the harvesting of early rice and jute is progressing. Foodstocks are everywhere sufficient. In the afflicted area in the Patna and Bhagalpur divisions the price of common rice is 10 seers per rupee at Madhubani and Motihari and 10½ seers at Sitamarhi. No relief works in Muzaffarpur and Chumparun. 272 persons employed on two relief works in the north of Bhagalpur. Persons receiving charitable relief are 4,800 in Muzaffarpur, 288 in Chumparun, and 129 in the Contai subdivision of Midnapur.

North-Western Provinces and Oudh.—*For week ending 7th August.*—The weather continues favourable, and the *kharif* crops are doing well. Markets are fully stocked, and prices are mostly stationary; but a fall is reported from a few districts. Fodder for cattle is abundant.

Punjab.—*For week ending 7th August.*—Partial rain in most districts. Prices rising in Rawalpindi and Shahpur, and stationary elsewhere. Ploughing for *kharif* crops are nearly over; sowings still in progress. Standing crops are flourishing and are in good condition. The standing crops at Hissar and Peshawar have suffered for want of rain. It is reported from Hissar that there is much fear of an almost complete failure of *kharif*. More rain wanted in almost all parts of the Province. Stock cattle are reported healthy, except in four villages of Sialkot tahsil. Fodder sufficient, except in Hissar.

Central Provinces.—*For week ending 7th August.*—Weather seasonable. Good rain in most districts; more rain is wanted in Nimar and in parts of

Jubbulpore and Bilaspur. *Kharif* crops in good condition. Prospects favourable. Fodder sufficient.

Burma.—*For week ending 3rd August.*—In Lower Burma the rainfall during the week was under 2 inches in Rangoon, Tharrawaddy, Toungoo, and Mergui and under 1 inch in Prome and Thayetmyo. Elsewhere there was heavy rain. Ploughing is backward, and the early crops are suffering from want of rain in Prome, Tharrawaddy, and Toungoo; elsewhere in Lower Burma the crop promises well. In Upper Burma heavy rain fell during the week in Mandalay, Bhamo, and Ruby Mines; fair in Shwebo, Yeu, Sagaing, and Myingyan districts; elsewhere but little rain fell. Rain is urgently wanted in Kyaukse and Minbu and to a less extent in Shwebo. Ploughing and sowing for the wet weather crops in Upper Burma are generally progressing favourably. The price of paddy, owing to heavy demands from Singapore, has risen 5 per cent. in Rangoon. Prices in other districts have risen as follows:—Pegu 10 per cent., Tharrawaddy 11 per cent., Toungoo 5 per cent., and Minbu 5 per cent. In the other districts there have been little or no fluctuations.

Assam.—*For week ending 7th August.*—Weather seasonable. Rainfall light. Harvesting of summer rice and transplanting of winter rice continue. Some damage has been done to crops in Nowgong and Sibsagar districts by floods.

Mysore and Coorg.—*For week ending 7th August.*—Good rainfall in the Civil and Military station of Bangalore and in the Bangalore district. Rainfall more or less throughout the State. Standing crops good, except in parts of the Mysore district, where more rain is wanted. Harvesting of paddy continues in parts. Outturn fair. No material change in prices.

Heavy rain in Coorg since 5th. Health improved.

Berar and Hyderabad.—*For week ending 7th August.*—Average rainfall fair in Berar. Weeding of cotton and *jowari* in progress. *Kharif* crops in good condition. Agricultural stock good. Fodder sufficient. Prices stationary.

Rainfall fair during the week in Hyderabad. *Kharif* and *abi* crops prospering. Water in tanks insufficient. Prices stationary.

Central India.—*For week ending 7th August.*—Good rain throughout Central India during the week. Heavy falls in Gwalior, Bundelkhand, and Goona. Prospects appear good throughout, especially in Goona, where condition of standing crops has improved. Condition of agricultural stock in Bhopal is reported as indifferent this week.

Rajputana.—*For week ending 7th August.*—Rainfall slight in Sirohi and Marwar, heavy in Deoli, and moderate elsewhere. Agricultural operations satisfactory. Standing crops want rain in Marwar and Sirohi. Agricultural stock good. Pasturage or fodder insufficient in parts of Marwar and Ulwar. Prices rising slightly in Marwar and Ajmere.

Nepal.—*For week ending 1st August.*—Beneficial rain fell. Autumn and winter rice progressing. Prospects of Indian corn good.

E. C. BUCK,

Secretary to the Government of India.

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
RAILWAY TRAFFIC.

ADMINISTRATION REPORT ON INDIAN RAILWAYS FOR 1888.

No. 381 R.T., dated Simla, 5th August, 1889.

RESOLUTION—By the Government of India, Public Works Department.

Read—

Letter No. 68 (Statistical) of the 29th May 1889, from the Director General of Railways, submitting the Administration Report on the Railways in India for the year 1888, Part I.

OBSERVATIONS.—The Annual Administration Report for 1888 has been submitted by the Director General of Railways with punctuality, and is in improved form in many details. The distribution of the several chapters has been rearranged, and the first chapter of the Report furnishes an interesting and useful summary of the principal results of the year's working.

2. The transfer to the State of the Oudh and Rohilkhand Company's undertaking on the 1st January 1889; the Railway Conference which was held at Simla in September 1888; and the completion during the year of the "Lansdowne" bridge over the Indus at Sukkur, with its formal opening on 27th March 1889, are referred to as being the principal events. The tunnel through the Khwaja-Amran mountains, commenced in 1887, was vigorously pushed on during the year, the length bored to the 31st March 1889 being 7,373 feet out of a total of 12,400.

3. The main facts related in Chapter I. of the Report may for general convenience be briefly recapitulated thus:

During the twelve months ending 31st March 1889 there were opened for public traffic 886 miles of railway, as compared with 988 miles opened during 1887-88; the total open mileage at the end of 1888-89 was 15,245 miles.

The Capital expended upon Railways directly by the State to end of the calendar year 1888 was Rs. 1,12,01,06,776, against Rs. 1,09,47,54,468 at the end of the calendar year 1887; while that expended by Companies for these two periods was respectively Rs. 80,69,19,877 and Rs. 79,70,90,168.

This does not include expenditure in Native States, which was Rs. 5,08,75,527 and Rs. 6,23,65,740, respectively, to end of 1887 and 1888.

The gross earnings on all Railways during 1888, inclusive of Steam-boat services, amounted to Rs. 19,76,44,749, against Rs. 18,46,47,937 during 1887.

During 1888 the number of passengers carried was 103,156,013, the coaching earnings being Rs. 6,43,50,321, and the passenger mileage 4,349,054,980; while during 1887, 96,289,324 passengers were carried, with coaching earnings of Rs. 6,02,83,498 and passenger mileage of 4,089,914,830.

The aggregate tonnage of goods, material, and live stock carried during 1888 was 22,393,202 tons, which earned Rs. 12,79,03,904, the ton-mileage being 3,576,997,334. In 1887 the totals were 20,195,677 tons, with an earning of Rs. 11,92,70,989 and a ton-mileage of 3,195,563,738.

The total working expenses amounted in 1888 to Rs. 9,87,43,474, or 49.96 per cent. of the gross earnings, as compared with Rs. 9,15,68,849, or

49·59 per cent. in 1887, the distribution under the several Departmental heads of expenditure being as under—

	1888.	1887.
Maintenance ...	14·12 per cent.	13·79 per cent.
Locomotive ...	16·15 "	15·80 "
Carriage and Wagon...	4·35 "	4·50 "
Traffic ...	7·98 "	8·11 "
General ...	5·26 "	5·48 "
Steam-boat ...	0·52 "	0·51 "
Special and Miscellaneous ...	1·58 "	1·40 "
TOTAL	49·96	49·59

The net earnings realised during 1888 were Rs. 9,89,01,275 against Rs. 9,30,79,088 in 1887, giving a return on the Capital expenditure on open lines, including Steam-boat services and Suspense accounts, of 5·12 per cent., against 5·09 per cent. in the previous year.

4. The financial results of the working of the year 1887-88 are given in paragraph 13 of Chapter I. of the Report, and show a net loss of Rs. 1,97,54,770. The year 1887-88 was a peculiarly unfavourable year; and as the figures for the calendar year 1888 are given in pages 86-89 of the Report, and though liable to some small alteration, are approximately correct, it will be useful to show what the results of Railway working for that year were. And here it must be remarked that the proper way of treating this subject is a matter of some complexity. The statistical results of Railway working are one thing; the financial results to the State are another. In the former the payments made to Companies for surplus profits and the share of profits paid on leased lines to the lessees, are excluded; in the latter they are included. Again, the Capital outlay on a Railway is one thing; the actual cost to the State when it has bought that Railway at 25 per cent. premium, as in the case of the East Indian Railway, or at 50 per cent. premium, as in the case of the Eastern Bengal Railway, is another thing. The following table shews the Capital expended on construction up to the 31st December 1888, the interest in rupees (sterling being converted at standard rates of exchange, not at contract rates in the case of Guaranteed Railways), the actual net earnings, as well as that portion of the net earnings which passed into the Government Treasury:

	East Indian.	State Commer- cial.	State Military.	State lines leased to Companies.	Guaranteed Railways.	TOTAL.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Capital outlay to 31st December 1888 ...	39,33,63,060	35,02,81,031	39,54,63,485	22,64,16,718	62,33,28,324	1,98,88,52,618
Interest for the year ...	2,60,16,053	1,51,42,187	1,91,87,394	88,03,392	3,96,83,855	10,88,32,881
Net earnings ...	3,00,27,370	1,85,32,091	82,82,706	19,18,121	3,71,08,236	9,58,68,524
Surplus or deficit ...	40,11,317	33,89,904	-1,09,04,688	-68,85,271	-25,75,619	-1,29,64,357
Percentage of net earn- ings on Capital ...	7·63	5·29	2·1	0·85	5·95	4·82
Net receipts of the State	2,92,86,543	1,78,82,276	80,05,617	19,91,402	3,14,13,238	8,85,79,076
Surplus or deficit ...	32,70,490	27,40,089	-1,11,81,777	-68,11,990	-82,70,617	-2,02,53,805
Percentage of net State receipts on Capital ...	7·44	5·1	2·02	0·88	5·04	4·45

5. The net earnings of the Railways were less than the interest which had to be paid on them by 130 lakhs of rupees. High interest the cause of the State loss on its Railways. Of this sum, 69 lakhs accrued on the "State Railways leased to Companies," which are only partially open and far from their

full working power. The rest of the deficit is due to the Military Railways and to the loss on the Guaranteed lines, which have to earn nearly $6\frac{1}{2}$ per cent., in order that enough gold may be purchased to pay the guaranteed interest in sterling in England. It will be observed that the total interest of the year amounts to nearly 5·5 per cent. on the Capital outlay. This is accounted for partly by the high rate on the Guaranteed lines, partly by the purchase of three of the old Guaranteed lines at a considerable premium, and partly by the fact that the figure shown as interest contains about 25 lakhs of rupees, which really are a sinking fund towards the extinction of the Capital debt raised to purchase those three lines. The cardinal fact to be noticed is that, after all deductions made, the Railways earned 4·82 per cent. on their Capital, of which the State received 4·45 per cent.; so that had the whole debt been raised at 4 per cent., which is the rate at which the Government can now borrow in silver in India, there would have been a profit of about 89 lakhs of rupees received in the Treasury. That this profit was turned into a loss of 202 lakhs of rupees is due to the fact that in past years the credit of the State was not so good, and it was forced to borrow at higher rates, in gold instead of silver, and through Guaranteed Companies, instead of coming directly on the market.

6. The main results in gross earnings and working expenses on all Railways for the last five years are compared in the following table:

	1884.	1885.	1886.	1887.	1888.
	Miles.	Miles.	Miles.	Miles.	Miles.
Open mileage on 31st December ...	11,619·17	12,210·48	12,870·39	14,059·34	14,459·97
Mean mileage worked during the year ...	11,036·79	12,044·91	12,508·36	13,532·74	14,378·54
<i>Gross Earnings—</i>					
	Rs.	Rs.	Rs.	Rs.	Rs.
Coaching ...	5,07,14,066	5,55,67,338	5,80,96,624	6,02,83,498	6,43,50,321
Goods ...	10,56,55,122	11,93,84,142	12,39,16,556	11,92,70,989	12,79,03,904
Steam-boat, Telegraph, and Miscellaneous	42,96,719	53,86,775	50,51,504	50,93,450	53,90,524
TOTAL ...	16,06,67,907	18,03,38,255	18,70,64,684	18,46,47,937	19,76,44,749
Earnings per mean mile worked ...	14,557·49	14,972·15	14,955·17	13,644·53	13,745·81
<i>Working Expenses—</i>					
Maintenance ...	2,23,21,879	2,44,52,857	2,52,09,000	2,54,66,397	2,79,14,081
Locomotive ...	2,68,12,037	2,92,46,660	2,90,40,683	2,91,82,754	3,19,07,256
Carriage and Wagon ...	84,91,968	89,88,424	86,53,837	83,03,003	86,00,132
Traffic ...	1,26,42,712	1,36,24,519	1,43,11,902	1,49,67,386	1,57,70,452
General ...	83,49,711	92,34,982	92,67,743	1,01,14,513	1,03,98,112
Steam-boat, Special, and Miscellaneous, and rent of leased lines	34,52,724	41,10,038	35,01,293	35,34,796	41,53,441
TOTAL ...	8,20,71,031	8,96,57,480	9,00,20,422	9,15,68,849	9,87,43,474
Expenses per mean mile worked ...	7,436·13	7,443·60	7,196·82	6,766·47	6,867·42
Ratio of expenses to earnings ...	51·08	49·72	48·12	49·59	49·96
Ratio of net earnings to Capital outlay ...	5·06	5·60	5·69	5·09	5·12

7. The gross earnings from all sources show steady improvement between 1884 and 1886. The falling off in 1887 may be attributed to a deficient wheat crop in the spring of that year and to failure in the cotton crop of 1886. The total weight of goods lifted during 1887 was greater than the previous year, but the ton-mileage was less, the increased tonnage being principally over the Eastern

Growth of gross earnings.

Bengal and Southern Mahratta lines, with a comparatively short lead; while there was a decrease in the tonnage lifted on the North Western and the Rajputana-Malwa Railways. This decrease in the ton-mileage appreciably affected the earnings. The gross earnings in 1888 show improvement as contrasted with 1887, consequent upon more favourable harvests and larger demands from England for wheat supplies; but they do not compare favourably with the figures for the years 1884-85-86, when the additional mean mileage worked is considered, the results being lower in earnings per mean mile in 1888 than those of any of the three years last named. This may partly be accounted for by the reduced earnings in carriage of construction material due to completion of several lines, and partly by the fact that extension of Railways seems, for the time at least, to have overtaken expansion of traffic.

8. Under Working expenses, the cost per mean mile worked shows unfavourably in comparison with 1887. The mean mileage worked was increased by 6.25 per cent., while the Maintenance expenses increased by 9.61, the Locomotive expenses by 9.34, and Steam-boat, Special, and Miscellaneous expenditure by 17.50 per cent. Apart from the increased ordinary outlay due to more extended

mileage, these high percentages of increase in Departmental working may be explained (a) under "Maintenance" by heavy renewals in permanent way on the East Indian, the Bombay, Baroda and Central India, the North Western, and the Southern Mahratta Railways; (b) under "Locomotive" by renewals and replacement of locomotive engines on the East Indian, the Great Indian Peninsula, and North Western Railways; by increased train-mileage worked over the Great Indian Peninsula, the Bombay, Baroda and Central India, and the Rajputana-Malwa Railways, and by the higher cost of fuel upon those Railways which drew supplies from England; and (c) under "Steam-boat and Special and Miscellaneous" by heavy repairs to steamers and replacement of barges for the river traffic on the Eastern Bengal Railway, and by provision made by the Oudh and Rohilkhand Railway for claims unadjusted and disputed at the end of the year, and for bonus to the Company's staff.

9. The gross earnings per mile of Railway per week (excluding Steam-boat) in five-yearly periods from the commencement up to the year 1888 are given in the following table, the lines being arranged in the order of their intake in 1888:

Railway (including Branches and leased Lines).	1853.	1858.	1863.	1868.	1873.	1878.	1883.	1888.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Bombay, Baroda and Central India	138	287	260	298	497	532
Great Indian Peninsula ...	119	173	175	357	282	394	467	526
East Indian	279	222	346	382	499	585	525
Eastern Bengal (a)	130	259	331	254	288	283
Rajputana-Malwa (b)	32	129	197	215
North-Western	171	112	154	193	228	202
Oudh and Rohilkhand	120	56	163	192	197
Madras	98	110	181	157	148	148	195
Burma	115	187	178
South Indian (c)	74	90	120	102	149	158
Bengal and North-Western	102

(a) Excluding the Bengal Central Railway.

(b) Excluding the Virangam-Mehsana-Vadnagar State Railway.

(c) Excluding the Villupuram-Dharmavaram State Railway, Nellore Branch.

10. The following table shows the percentage of working expenses to gross earnings, and gross earnings per mile open per week, on the principal Railways for 1887 and 1888:

RAILWAYS (INCLUDING BRANCHES AND LEASED LINES.)	1887.		1888.	
	Percentage of Working expenses to Gross earnings (excluding Steam-boat).	Gross earnings per mile open per week (excluding Steam-boat).	Percentage of Working expenses to Gross earnings (excluding Steam-boat).	Gross earnings per mile open per week (excluding Steam-boat).
		Rs.		Rs.
Bombay, Baroda and Central India ...	41.89	508	44.11	532
Great Indian Peninsula ...	46.84	511	46.96	526
East Indian ...	32.69	529	34.16	525
Eastern Bengal (a) ...	51.61	268	45.77	283
Rajputana-Malwa (b) ...	50.84	191	48.26	215
North-Western ...	72.11	182	67.27	202
Oudh and Rohilkhand ...	52.83	186	57.38	197
Madras ...	64.76	189	58.72	195
Burma ...	53.12	192	62.33	178
South Indian (c) ...	68.20	149	68.98	158
Bengal and North-Western ...	56.81	90	53.50	102

11. The average statistical cost of carrying one passenger one mile on the principal Railways during 1888 is as follows:

				Pies.
Standard gauge.	Eastern Bengal ...	...	...	0.60
	East Indian* ...	...	...	0.76
	Madras ...	...	...	1.02
	Oudh and Rohilkhand ...	...	...	1.13
	Bombay, Baroda and Central India* ...	...	...	1.17
	Great Indian Peninsula* ...	...	...	1.41
Metre gauge.	North-Western* ...	...	...	1.45
	Rajputana-Malwa ...	...	...	0.82
	Bengal and North-Western ...	...	...	0.99
	South Indian, including Pondicherry ...	...	...	1.03
	Burma ...	...	...	1.50
	Southern Mahratta* ...	...	...	1.74(d)

12. The average statistical cost of hauling one ton of goods one mile during the year is —

				Pies.
Standard gauge.	East Indian* ...	...	...	2.05
	Bombay, Baroda and Central India* ...	...	...	3.45
	Oudh and Rohilkhand ...	...	...	3.47
	Great Indian Peninsula* ...	...	...	3.74
	North-Western* ...	...	...	4.23
	Eastern Bengal* ...	...	...	4.70(d)
Metre gauge.	Madras ...	...	...	4.96
	Bengal and North-Western ...	...	...	3.45
	Rajputana-Malwa ...	...	...	3.64
	Burma ...	...	...	5.49
	South Indian, including Pondicherry ...	...	...	6.32
	Southern Mahratta* ...	...	...	6.61(d)

13. On Maintenance of Way and Works the average expenditure for the year per mean mile maintained on the principal standard gauge lines is Rs. 2,502 and on the metre gauge,

(a) Excluding the Bengal Central Railway.

(b) Excluding the Viramgam-Mehsana-Vadnagar State Railway

(c) Excluding the Villupuram-Dharmavaram State Railway, Nellore Branch.

(d) Corrected from the Analysis of Working.

* Including Branches and leased Lines.

Rs. 1,364. Excluding the cost of permanent-way, the cost of maintenance per mile of track, including sidings, is the lowest for its gauge on the East Indian Railway, with a mean age of 23·95 years. Of the metre gauge lines, the Bengal and North-Western Railway is the lowest. The details are given in the following table :

RAILWAYS (INCLUDING BRANCHES AND LEASED LINES).				COST PER MILE OF TRACK, INCLUDING SIDINGS.			Cost per mean mile maintained.	Ton-mileage per mean mile worked.	Total cost of maintenance per 1,000 gross ton-miles.
				Mean age in years.	Excluding Permanent-way.	Permanent-way.			
Standard Gauge.									
					Rs.	Rs.	Rs.		Rs.
East Indian	...	...	...	23·95	481	1,571	3,131	1,902,252	1·62
North-Western	...	...	...	10·97	823	1,022	2,152	940,071	2·28
Eastern Bengal (a)	...	...	...	12·54	583	845	1,795	797,588	2·12
Madras	...	...	...	24·96	834	567	1,652	745,911	2·21
Great Indian Peninsula	...	...	...	22·23	1,131	1,188	3,204	1,747,698	1·84
Bombay, Baroda and Central India	...	...	...	22·34	1,452	1,460	3,914	1,711,840	2·29
Oudh and Rohilkhand	...	...	...	13·66	611	633	1,449	890,018	1·63
Metre Gauge.									
Rajputana-Malwa (b)	...	...	...	9·34	406	624	1,174	704,273	1·67
Southern Mahratta	...	...	...	3·18	465	556	1,089	283,244	3·85
Burma	...	...	...	6·04	414	1,103	1,759	526,913	3·20
South Indian (c)	...	...	...	15·49	999	1,130	2,374	483,132	4·92
Bengal and North-Western	...	...	...	3·73	356	243	663	400,400	1·66

14. The differences in the average prices of coal per ton render any comparison of working on the basis of Locomotive cost misleading. A better comparison can be made if the cost of fuel be deducted from the Locomotive expenses. Excluding the cost of fuel, the Locomotive expenses per 1,000 gross ton-miles on the principal standard and metre gauge lines compare as follows :

<i>Standard Gauge.</i>							
1887.		Rs.		1888.		Rs.	
East Indian*	...	1·01	East Indian*	...	...	1·04	
Oudh and Rohilkhand	...	1·22	Oudh and Rohilkhand	...	...	1·18	
Bombay, Baroda and Central India*	...	1·51	Eastern Bengal*	...	...	1·36	
Eastern Bengal*	...	1·59	Bombay, Baroda and Central India*	...	...	1·42	
North-Western*	...	2·01	Madras	...	...	1·69	
Great Indian Peninsula*	...	2·05	North-Western*	...	...	1·87	
Madras	...	2·07	Great Indian Peninsula*	...	...	1·90	
<i>Metre Gauge.</i>							
Bengal and North-Western	...	1·46	Bengal and North-Western	...	...	1·29	
Burma	...	1·69	Rajputana-Malwa	...	...	1·68	
Rajputana-Malwa	...	2·02	Burma	...	...	1·69	
Southern Mahratta*	...	2·03	Southern Mahratta*	...	...	2·02	
South Indian*	...	2·15	South Indian*	...	...	2·21	

15. Particulars of the fuel consumption and supply are given in Chapter IX. Compared with 1887, the consumption of coal on all Railways was greater by $12\frac{1}{4}$ per cent. The quantity of English coal rose by $11\frac{3}{4}$ per cent., while the quantity of country coal consumed rose by $12\frac{1}{2}$ per cent. The total consumption of coke and wood

(a) Excluding the Bengal Central Railway, excepting in two last columns.

(b) Excluding the Virangam-Mehsana-Vadnagar State Railway.

(c) Excluding the Villupuram-Dharmavaram State Railway, Nellore Branch.

* Including Branches and leased Lines.

increased by 30½ per cent. and 10 per cent. respectively, and that of patent fuel decreased by 7 per cent.

The cost of fuel per train-mile and the consumption per 1,000 gross ton-miles on the principal Railways are stated below :

Railways (including Branches and leased Lines).	Standard or Metre Gauge.	Cost per train-mile.	Consumption per 1,000 gross ton-miles.	Source and description of fuel.
		Annas.	lbs.	
East Indian ...	S	0·83	136·17	Bengal coal.
Eastern Bengal ...	S	2·08	198·64	Bengal coal.
Bengal and North-Western	M	2·32	152·73	Bengal coal.
South Indian...	M	3·29	191·62	English and Australian coal; principally the former.
Oudh and Rohilkhand ...	S	3·43	145·47	Bengal coal.
Madras ...	S	3·74	(a) 398·53	Wood and patent fuel; principally the former.
Burma ...	M	3·84	135·28	English coal, patent fuel and wood.
Southern Mahratta ...	M	3·88	(a) 612·95	English coal and wood; principally the latter.
North-Western ...	S	4·30	126·58	English, Bengal, Khost and Dardot coal, also patent fuel and wood.
Rajputana-Malwa ...	M	4·40	155·88	English and Bengal coal; principally the latter.
Great Indian Peninsula ...	S	4·41	177·59	English, Warora, Umaria, Mohpani, Singareni coal, and wood; but principally English coal.
Bombay, Baroda and Central India.	S	4·67	113·84	English coal and wood; a very small percentage of the latter.

16. The Carriage and Wagon expenses for the principal standard and metre gauge lines open for traffic show the following comparison of cost per 1,000 vehicle miles run by home vehicles :

Standard Gauge.

1887.	Rs.	1888.	Rs.
East Indian* ...	4·84	Oudh and Rohilkhand ...	4·26
Oudh and Rohilkhand ...	5·10	East Indian* ...	4·47
Eastern Bengal* ...	7·33	Eastern Bengal* ...	8·46
Bombay, Baroda and Central India*	9·11	Bombay, Baroda and Central India*	9·80
North-Western*	11·52	North-Western* ...	10·96
Great Indian Peninsula*	11·93	Great Indian Peninsula*	11·70
Madras ...	15·45	Madras ...	13·64

Metre Gauge.

Southern Mahratta* ...	2·57	Bengal and North-Western ...	2·08
Bengal and North-Western ...	2·72	Southern Mahratta* ...	3·98
Burma ...	5·49	Burma ...	4·62
Rajputana-Malwa ...	5·98	Rajputana-Malwa ...	5·00
South Indian* ...	7·53	South Indian* ...	6·27

(a) In terms of wood.

* Including Branches and leased Lines.

17. The following table compares the cost of Train staff in annas per train-mile, the lines being arranged in order of cheapness :

Railways (including Branches and leased Lines).					Cost per train-mile.
					Annas.
South Indian	...	...	...	...	0.334
Bengal and North-Western	...	...	...	...	0.498
Bombay, Baroda and Central India	...	...	...	...	0.544
Southern Mahratta	...	...	...	...	0.562
Rajputana-Malwa	...	...	...	...	0.571
Madras	...	...	...	...	0.602
Eastern Bengal	...	...	...	...	0.715
Oudh and Rohilkhand	...	...	...	...	0.746
Burma	...	...	...	...	0.875
North-Western	...	...	...	...	0.973
East Indian	...	...	...	...	1.001
Great Indian Peninsula	...	...	...	...	1.308

18. The Traffic expenses per train-mile are given in the following table ; the cost is highest on the Burma State Railway and lowest on the South Indian Railway :

Railways (including Branches and leased Lines).		Train-mileage per mean mile worked.	Average distance between stations, in miles.	Cost per train-mile.
<i>Standard Gauge.</i>				
			Miles.	As.
Great Indian Peninsula	...	6,129	7.30	4.88
Oudh and Rohilkhand	...	2,972	6.86	5.05
North-Western	...	3,026	7.59	5.09
Bombay, Baroda and Central India	...	5,063	5.62	5.26
Madras	...	2,849	6.71	5.36
East Indian	...	5,055	8.66	5.61
Eastern Bengal (a)	...	3,786	4.88	6.92
<i>Metre Gauge.</i>				
South Indian (b)	...	3,096	6.49	3.48
Rajputana-Malwa (c)	...	3,643	7.24	3.78
Bengal and North-Western	...	2,001	5.88	4.15
Southern Mahratta	...	1,949	8.06	4.43
Burma	...	2,954	7.00	6.99

19. The General Charges, on the basis of percentage on Gross earnings, vary as follows on the principal standard and metre gauge lines :

<i>Standard Gauge.</i>					
Rs.†	1887.	Per cent.	Rs.†	1888.	Per cent.
(26,597) Great Indian Peninsula*	...	3.12	(27,346) Great Indian Peninsula*	...	3.11
(27,559) East Indian*	...	4.38	(27,639) Bombay, Baroda and Central India.*	...	4.13
(26,388) Bombay, Baroda and Central India.*	...	4.56	(27,333) East Indian*	...	4.22
(14,857) Eastern Bengal	...	5.01	(15,698) Eastern Bengal	...	4.26
(9,815) Madras	...	5.89	(10,531) North-Western*	...	5.30
(9,465) North-Western*	...	6.21	(10,165) Madras	...	5.83
(9,653) Oudh and Rohilkhand	...	7.10	(10,220) Oudh and Rohilkhand	...	7.55

(a) Excluding the Bengal Central Railway.

(b) Excluding the Villupuram-Dharmavaram State Railway, Nellore Branch.

(c) Excluding the Virangam-Mehsana-Vadnagar State Railway.

* Including Branches and leased Lines.

† The figures in parentheses represent the Gross earnings (including Steam-boat), per mean mile worked.

Metre Gauge.

Rs.†	1887.	Per cent.	Rs.†	1888.	Per cent.
(10,074)	Burma ...	6·30	(11,184)	Rajputana Malwa ...	6·09
(9,930)	Rajputana-Malwa ...	6·83	(7,618)	South Indian* ...	6·88
(7,293)	South Indian* ...	7·17	(9,269)	Burma ...	7·02
(4,529)	Southern Mahratta* ...	12·44	(5,876)	Bengal and North-Western ...	11·68
(5,170)	Bengal and North-Western ...	13·19	(4,495)	Southern Mahratta* ...	12·73

20. The figures in the various tables are for the most part the bare results of the working as shown in the published Revenue Accounts of the various lines. When contrasting the results, the Government of India is fully aware how much the varying conditions under which the traffic is worked on the different lines affect these results. The amount of the earnings per mile per week; the want of balance in the up and down traffic; the fluctuations in the amount of traffic at different periods of the year; the gradients; the price of fuel—all these, together with other varying local conditions, greatly influence the results of the working and may account for the divergences shown.

21. The quantity of merchandise carried was 17,937,610 tons, or about 8 per cent. more than in 1887, and the freight received aggregated Rs. 12,24,52,343, being more by about 7 per cent. Of this increase, consignments of "Railway plant and rolling stock" contributed 30 per cent. in weight and 18 per cent. in receipts, and the grain traffic contributed 15 per cent. in weight and 40 per cent. in earnings, "Oil seeds" giving 11 per cent. in weight and 16 per cent. in receipts. There was also an increase in the coal and jute consignments both in the quantity carried and in the receipts.

A falling off occurred under "Metals" of 13 per cent. in weight and 19 per cent. in receipts, and under "Raw cotton" of 14 per cent. in weight and 17 per cent. in earnings, compared with 1887.

22. The following table shows the average distance over which a ton of goods and a passenger was carried on some of the principal Railways:

Railways (including Branches and leased Lines).				Mean mileage worked during the year 1888.	Average distance over which a ton of goods was hauled.	Average distance travelled by each passenger.
				Miles.	Miles.	Miles.
East Indian	...	...	...	1,706·05	202·62	66·51
Eastern Bengal	...	...	...	795·11	105·17	27·07
Bengal and North-Western	...	...	...	376·00	123·94	33·60
Oudh and Rohilkhand	...	...	...	692·46	117·13	44·70
North-Western	...	...	...	2,440·02	164·57	55·35
Rajputana-Malwa (a)	...	...	...	1,664·42	257·72	55·30
Bombay, Baroda and Central India	...	...	...	460·90	166·78	19·89
Great Indian Peninsula	...	...	...	1,501·48	247·59	44·67
Southern Mahratta	...	...	...	854·05	96·36	44·23
Madras	...	...	...	839·27	105·17	39·16
South Indian (b)	...	...	...	662·00	47·32	34·90
Burma	...	...	...	364·24	87·93	28·12

(a) Excluding the Virangam-Mehsana-Vadnagar State Railway.

(b) Excluding the Villupuram-Dharmavaram State Railway, Nellore Branch.

* Including Branches and leased Lines.

† The figures in parentheses represent the Gross earnings (including Steam-boat), per mean mile worked.

23. The following table shows the Gross earnings, Working expenses, and Net earnings, and gives also figures per train-mile, excluding Steam-boat, of all Railways under the following grouping :

	Gross earnings.	Per train-mile.	Working expenses.	Per train-mile.	Net earnings.	Per train-mile.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
East Indian Railway	4,53,91,210	5.45	1,53,35,210	1.84	3,00,56,000	3.61
State Railways (Commercial)	3,58,97,826	3.21	1,78,97,067	1.61	1,80,00,759	1.60
Ditto (Military)	2,55,74,038	3.46	1,72,03,129	2.33	83,70,909	1.13
State Lines leased to Companies	73,62,300	2.40	54,38,286	1.77	19,24,014	0.63
Guaranteed Railways	7,48,43,974	4.15	3,77,21,046	2.09	3,71,22,928	2.06
Assisted Companies	36,92,439	3.24	20,82,691	1.83	16,09,748	1.41
Native States	36,98,558	3.26	20,29,954	1.83	16,68,604	1.43

In 1887 the results per train-mile were—

	Gross earnings.	Working expenses.	Net earnings.
	Rs.	Rs.	Rs.
East Indian Railway	5.36	1.72	3.64
State Railways (Commercial)	3.36	1.77	1.59
Ditto (Military)	3.39	2.44	0.95
State Lines leased to Companies	2.69	1.87	0.82
Guaranteed Railways	4.15	2.08	2.07
Assisted Companies	3.09	1.82	1.27
Native States	3.18	1.92	1.26

24. The number of persons of all races employed on open lines during 1888 was 243,585, against 225,047 in 1887. The distribution is shown in the following table :

YEAR ENDING	NUMBER OF EMPLOYÉS.				Number of miles open.	Number of stations.
	Euro-peans.	East Indians.	Natives.	Total.		
31st December 1887 ...	4,684	5,077	215,286	225,047	14,065	1,988
31st December 1888 ...	4,674	5,604	233,307	243,585	14,463	2,096

The Native Staff represented 95.78 per cent. of the entire body of Railway employés. The percentage of increase in the total number employed was 8.24. The length of additional open mileage gives a percentage of 2.82, and the additional stations open a percentage of 5.43. Under the head of Europeans,

there was a decrease of 0·21 per cent.; under East Indians an increase of 10·38 per cent.; and under Natives an increase of 8·37 per cent.

25. The total number of persons killed and injured during the year 1888 was 1,334, as compared with 1,121 during 1887. The number killed was 482, as against 429. Of these, 41 were killed from causes beyond their own control, 193 from their own want of caution, 12 at level crossings, 219 while trespassing and by suicide, and 17 from miscellaneous causes.

The number of accidents to trains increased from 2,844 in 1887 to 3,252 in 1888, or by about $14\frac{1}{3}$ per cent. The number of train accidents per 1,000 train-miles was 0·06, which is the same number as in 1887. There were two passengers killed from causes beyond their own control, being an average of one per $51\frac{1}{2}$ millions of passengers travelling; and 26 passengers injured, being an average of one per four millions, or an average of one casualty for $155\frac{1}{2}$ millions of miles travelled.

RESOLUTION.—The thanks of the Government of India are due to Lieutenant-Colonel Conway-Gordon, R.E., C.I.E., Director General of Railways, for the zeal and ability with which he conducted the duties of his office throughout the year under review.

The Governments of Madras, Bombay, Bengal, the North-Western Provinces and Oudh, and the Punjab.
The Chief Commissioners of the Central Provinces, Burma, and Assam.
The Residents at Hyderabad and Mysore.
The Agents to the Governor General for Central India, Rajputana, and Baluchistan.
The Accountant General, Public Works Department.
The Director General of Railways.
The Consulting Engineers to the Government of India for Railways, Calcutta, Lucknow, and Central Division.

ORDER.—Ordered, that this Resolution be communicated, for information, to the Local Governments, Administrations, and Officers noted in the margin.

Ordered also, that this Resolution be published in the Supplement to the *Gazette of India*.

B. C. B. PEMBERTON, Colonel, R.E.,
Secretary to the Government of India.

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
RAILWAY TRAFFIC.

No. XV. OF 1889-90.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used as far as possible.

Latest Return received.	RAILWAYS.	WEEK ENDING 14TH JULY, 1888.		WEEK ENDING 13TH JULY, 1889.		TOTAL RECEIPTS FROM 1ST APRIL TO 14TH JULY, 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 13TH JULY, 1889.		Total increase in 1889-90.	Total decrease in 1889-90.		
		Total mean length open.	Receipts.		Total mean length open.	Receipts.		Total.	Per mile open per week.			Total.	Per mile open per week.
			Total.	Per mile open.		Total.	Per mile open.						
	<i>State Lines worked by Companies.</i>		<i>Rs.</i>	<i>Rs.</i>		<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>	<i>Rs.</i>		
27th July, 1889	East Indian	1,514	6,63,062	438	1,514	7,87,543	520	1,32,40,541	583	1,34,98,774	595	2,58,233	
27th ditto	Patna-Gya	57	6,111	107	57	8,278	145	1,20,025	147	1,28,555	150	2,530	
27th ditto	Dildarnagar-Ghazipur	12	635	53	12	756	63	17,160	95	14,904	83	2,256	
27th ditto	Sindia	75	7,232	96	...	(a)	...	1,21,573	108	(a)	...	1,21,573	
20th ditto	Rajputana-Malwa	1,664	2,82,349	170	1,664	3,30,000	198	58,72,791	235	66,19,221	268	7,46,430	
20th ditto	Bengal-Nagpur (b)	186	20,604	111	305	(c) 20,909	69	5,53,801	198	(c) 6,46,440	146	92,639	
20th ditto	Southern Maratha (d)	850	72,217	85	857	68,774	80	12,01,189	94	13,24,489	103	1,23,300	
20th ditto	Do. Mysore Section	140	9,196	65	219	12,104	56	1,56,379	75	2,14,057	65	57,078	
20th ditto	Indian Midland	136	11,124	82	668	(e) 42,553	64	2,46,436	121	(e) 8,87,041	97	6,40,605	
13th ditto	Villupuram-Dharma- veram (Nellore Branch)	83	3,549	43	83	4,594	55	76,361	61	74,316	60	2,045	
13th ditto	Bareilly-Pilibhit	36	1,268	35	36	1,544	43	23,995	48	31,384	62	7,389	
	TOTAL	4,753	10,77,347	227	5,415	12,77,115	236	2,16,36,251	303	2,34,39,181	295	18,02,930	
	<i>State Lines worked by Government.</i>												
20th July, 1889	North Western (f)	2,411	4,07,290	169	2,386	4,61,953	194	72,10,104	199	80,27,529	226	8,17,425	
20th ditto	Oudh and Rohilkhand	692	1,03,902	150	692	1,20,729	174	23,13,068	223	25,30,197	244	2,17,129	
13th ditto	Bengal Central	125	10,260	82	125	12,611	101	1,83,471	98	2,07,711	111	24,240	
20th ditto	Wardha Coal	45	11,887	264	45	13,058	290	2,20,636	327	2,56,486	384	35,850	
20th ditto	Eastern Bengal Rail- ways	673	1,35,409	201	747	1,52,099	204	22,15,136	219	24,01,287	234	1,86,151	
20th ditto	Nalhati	27	1,640	61	27	1,806	67	29,611	78	28,019	73	1,592	
27th ditto	Tirhoot	259	27,800	107	273	37,405	137	5,52,710	152	5,84,059	153	31,349	
20th ditto	Lucknow-Sitapur- Sihramau	105	3,679	35	105	6,327	60	82,228	52	1,07,213	68	24,985	
13th ditto	Jorhat	25	945	37	25	1,422	56	15,745	36	16,917	38	1,172	
13th ditto	Cherra-Companyganj.	...	(g)	...	7	16	2	1,140	10	1,442	13	302	
13th ditto	Burma	392	46,866	120	553	76,504	138	9,26,999	164	14,34,151	173	5,07,152	
	TOTAL	4,754	7,49,678	158	4,985	8,83,930	177	1,37,50,848	193	1,55,95,011	213	18,44,163	
	<i>Lines worked by Guar- anteed Companies.</i>												
20th July, 1889	Madras	840	1,62,001	193	840	1,87,546	223	24,75,077	196	27,62,380	221	2,87,303	
13th ditto	South Indian	654	1,01,170	155	654	1,09,895	168	16,56,229	169	17,57,597	181	1,01,368	
20th ditto	Great Indian Peninsula	1,497	(h) 4,75,255	318	1,440	(i) 4,52,779	315	1,47,01,112	653	1,14,81,858	535	32,19,254	
20th ditto	Bombay, Baroda and Central India (j)	461	1,48,857	323	461	1,61,000	349	42,39,999	613	(i) 43,78,649	639	1,38,650	
	TOTAL	3,452	8,87,283	257	3,395	9,11,220	268	2,30,72,417	446	2,03,80,484	404	26,91,933	
GRAND TOTAL (GUARANTEED AND STATE)		12,959	27,14,368	209	13,795	30,72,265	223	5,84,59,516	301	5,94,14,676	292	9,55,160	
GROSS ESTIMATED EXPENSES		...	...	...	...	...	...	2,87,99,321	148	2,92,09,179	144	4,09,858
NET RECEIPTS		...	...	...	...	...	...	2,96,60,195	153	3,02,05,497	148	5,45,302
	<i>Assisted Companies.</i>												
27th July, 1889	Tarakeshwar	22	5,172	235	22	5,340	243	93,252	279	93,631	281	379	
First 6 days of July, 1889	Dibru-Sadiya	...	...	...	...	(k)	...	(l) 1,17,860	108	(m) 1,34,919	124	17,059
27th July, 1889	Bengal and North- Western	376	42,040	112	376	45,829	122	8,45,673	150	8,78,831	157	33,158	
13th ditto	Rohilkhand-Kumaun	67	6,705	100	67	7,075	106	1,14,290	122	1,23,769	132	9,479	
	TOTAL	465	53,917	116	465	58,244	125	11,71,075	144	12,31,150	153	60,075	
	<i>Native States.</i>												
20th July, 1889	His Highness the Ni- zam's Guaranteed Company	277	24,124	87	354	41,660	118	4,49,732	108	6,19,505	118	1,69,773	
20th ditto	His Highness the Gaekwar's	59	1,526	26	59	1,810	31	47,398	54	43,621	50	3,777	
20th ditto	His Highness the Gaek- war's Veramgam- Mehsana-Vadnagar	21	656	31	27	800	29	15,679	50	18,486	46	2,807	
20th ditto	Bhavnagar-Gondal- Junagarh-Porbandar	193	13,447	70	260	12,338	47	3,44,806	119	4,77,984	124	1,33,178	
20th ditto	Morvi	68	2,820	41	68	2,270	33	65,412	64	72,381	71	9,969	
20th ditto	Jodhpore	124	7,012	57	124	5,900	48	1,22,050	66	1,11,075	60	10,975	
	TOTAL	742	49,585	67	892	64,778	73	10,45,077	94	13,43,052	102	2,97,975	

- (a) Included with the Indian Midland Railway.
(b) Includes the Katni-Umaria Branch.
(c) Includes Sanctoria Coal Section of the Bengal-Nagpur Railway.
(d) Includes the Bellary-Kistna State Railway.
(e) Includes the Sindia and Bhopal-Itarsi State Railways.
(f) Includes the Amritsar-Pathankot and Rajpura-Bhatinda State Railways.
(g) Traffic stopped on account of breach of line.

- (h) Includes the Dhond-Mānmād, Khāmgaon, Amrāoti, and Bhopal-Itarsi State Railways.
(i) Includes the Dhond-Mānmād, Khāmgaon, and Amrāoti State Railways.
(j) Includes the Patri Branch.
(k) Return not received.
(l) Total receipts from 1st April to 7th July, 1888.
(m) Total receipts from 1st April to 6th July, 1889.

M. C. BRACKENBURY, Major, R.E.,
Under Secretary.

SIMLA, 8th August, 1889.

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SUPPLEMENT TO
The Gazette of India.

No. 33.

SIMLA, SATURDAY, AUGUST 17, 1889.

OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor-General will in future be published in PART VI. of the GAZETTE.

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GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

**Weather Review of India for the week ending at 8 a.m. on
Monday, August 12th, 1889.**

The weather during the past week has been of the same general character as that which has prevailed since the setting in of the rains, *viz.*, a moderately strong monsoon over the Western and Central districts, a somewhat feeble monsoon over the Bay and Northern India, and a general absence of important cyclonic storms. The net result of these conditions has been a somewhat deficient rainfall throughout the district affected by the Bay monsoon and a slightly excessive rainfall elsewhere.

The chart of the 6th showed a large elongated, but shallow, depression stretching from the north-west of the Bay westward across Orissa and the Circars as far as the east of the Central Provinces, a large low pressure area over the Western desert, and a high pressure area over Malabar, Ceylon, and the south of the Bay. The winds over the greater part of the Bay, Bengal, the North-Western and Central Provinces, and the head of the Peninsula were influenced by the elongated depression noticed above and executed a feeble cyclonic circulation around it, but in all other parts of India the winds blew from the ordinary monsoon directions. The Arabian Sea monsoon current was blowing freshly, but the winds in Northern India were feeble. Between the morning of the 6th and of the 7th the depression had moved westward, and the centre at 8 A.M. on the 7th lay between Seoni and Raipur. Owing to this westerly movement of the storm centre and the consequent change in the centre of circulation of the cyclonic winds, southerly and south-westerly winds had appeared over the Bay; but this was the only important change in the wind directions. The monsoon was blowing more freshly over the Bay, and strongish squally winds were reported from the neighbourhood of the depression. By the morning of

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the 8th the depression had largely filled up, but the centre had again moved somewhat to the westward and apparently lay between Seoni and Saugor. A new but very slight disturbance had appeared near Kurrachee, and a small high pressure area had been formed over the west of the North-Western Provinces and the east of the Punjab. The chart of the 9th showed that the depression over the Central Provinces had changed very little as regards position, but that it had developed somewhat in intensity, the lowest reading at the centre being $29.548''$ as compared with $29.566''$ on the preceding day. The local depression near Kurrachee and the local high pressure area near Roorkee had alike broken up. The wind circulation was generally similar to that of the previous day, except at the head of the Bay, where variable winds had reappeared, with indications of the formation of a new disturbance off the Orissa Coast. On the 10th the distribution of pressure was such as is characteristic of general monsoon conditions. Readings were highest in Malabar and Ceylon, and relatively high in Burma and Assam; lowest in the Western desert, and relatively low within a belt or trough of low pressure running from the Punjab and Rajputana south-eastward across the Central and North-Western Provinces as far as the Circars and the north-west of the Bay. Within this trough variable winds prevailed—to the north of it, the Bay monsoon; and to the south of it, the Arabian Sea monsoon. The only important change shown on the chart of the 11th was the slight northerly movement of the trough of low pressure. On the 12th this movement was continued, so that the trough lay further to the north than usual in August, and the monsoon current from the Bay into Northern India was a good deal interrupted.

Temperature has been on the whole high for the time of year, except in Madras and the Central Provinces, where heavy rain and much cloud has reduced the heat. In Bengal and the North-Western Provinces, where the rainfall on the contrary was light, the mean temperature exceeded the normal on every day of the week. The warmest days occurred in the early part of the week. On the 6th the mean temperature of the Punjab, Sind, and Rajputana was 3° above the normal; and on the 7th it was $3\frac{1}{2}^{\circ}$ in the North-Western Provinces, 4° in the Punjab, and $4\frac{1}{2}^{\circ}$ in Sind and Rajputana above the normal. Maxima considerably exceeding 100° were reported from nearly all stations in the Punjab and Sind in the early part of the week; but on the 9th and 10th a considerable fall occurred, and on the 12th the highest reading was 96.3° at Ludhiana and Multan.

The following table shows the excess or defect of the mean average temperatures of the different Provinces for the present and for the preceding week:

PROVINCES.	Difference of Mean Temperature of Last Week from Normal.	Difference of Mean Temperature of present Week from Normal.
Burmah	+ 1.5°	+ 0.6°
Bengal	+ 0.9°	+ 1.2°
North-Western Provinces	— 1.2°	+ 2.2°
Punjab	+ 0.4°	+ 1.1°
Bombay	+ 1.8°	+ 0.7°
Central Provinces and Berar	+ 1.8°	— 0.6°
Guzerat and Central India	+ 1.7°	+ 0.5°
Sind and Rajputana	+ 2.9°	+ 1.2°
Madras	— 0.2°	— 0.1°

This table shows that, relatively to the average, the present week has been slightly in Bengal and the Punjab and considerably in the North-Western Provinces warmer than the preceding week, but that elsewhere the weather has been cooler.

Rain.—As mentioned in preceding sections, strongly marked monsoon conditions have prevailed over India during the past week, and rain has fallen in all divisions of India. The rainfall has generally occurred in steady moderate falls on each day of the week and, with few exceptions, there have been no very heavy downpours. In Northern India—more particularly in Behar and the North-Western Provinces—the rainfall has been slighter than elsewhere, and the weather there has been showery with fair intervals.

The following is a brief description of the daily distribution of rainfall :

On the 6th the Punjab, Sind, and the greater part of Rajputana were without rain, and Western Bengal and the North-Western Provinces had only scattered showers. Elsewhere rain was general. On the 7th the only change was that a little more rain was reported from Rajputana. On the 8th there was a very heavy fall of rain at Mussoorie and Roorkee, and slight rain along the foot of the hills in the Punjab, as well as at Kurrachee and Hyderabad in Lower Sind. In the Central parts of the country some heavyish falls were experienced. In Western Bengal and the North-Western Provinces the weather remained fair, with a few showers, and elsewhere there was no change. On the 9th the only change was the more general rain over the Punjab and Sind. On the 10th, 11th, and 12th rain practically fell in all parts of India,—heavily at the hill stations, and moderately elsewhere.

The table at the close of the Summary shows that at twenty-nine divisions the rainfall of the week was deficient ; that at twenty-one it was excessive ; and that at two no comparison is possible. Roughly divided, those divisions which receive their rainfall from the Bay of Bengal current have received short rains, and those which receive their rainfall from the Arabian Sea monsoon have received excessive rain. The whole of Burma, the whole of Bengal except Orissa, and the whole of the North-Western Provinces have had deficient rainfall. The Punjab, which has been more or less influenced by both branches of the monsoon, has received more favourable rains than other parts of Northern India, four of the divisions reporting an excess and only two a deficiency. In the Hill districts the rainfall is about half the normal average amount. The Western districts of the Peninsula had more than the average rainfall ; but Mysore and the Bombay Deccan had rather less than usual. The Central divisions of the country, including Khandeish, Berar, the Central Provinces, Central India, and Rajputana, all received considerably more than the normal fall during the week. Guzerat and Kattiawar participated in this excess ; but in Sind the rainfall was slightly short. In the Madras divisions the East Coast North and Hyderabad South received somewhat heavier rains than usual ; but all the other divisions report a deficiency.

The maximum falls all over Northern India are quite unimportant. Cherrapunji received only 5·7 inches of rain during the week—a striking example of the weakness of the Bay current. In the west of the Peninsula the maximum falls were larger, one or two places recording total falls of from 10 to 15 inches ; but even here they are the exception. In the Central parts of the country the average of the maxima is higher, but the falls are in no way remarkable.

The final column of the table shows the state of the seasonal rainfall. In Burma and East Bengal there is a deficiency ; in Assam an excess ; and in the other divisions in Bengal about an average fall. The east of the North-Western Provinces and the submontane district show an excess ; but the Western districts and also the whole of the Punjab report deficient rains. In the Peninsula, the Konkan and Madras (South Central) districts are in excess of the average ; but the other districts in the west and centre exhibit a deficiency, while on the East Coast again there is an excess. In the Central parts of India, including Kattiawar and Guzerat, the seasonal rainfall is above the average ; but in Sind there is a considerable deficiency.

PROVINCE.	DIVISION.	RAINFALL DATA FOR WEEK ENDING AUGUST 12TH, 1889.			RAINFALL DATA FROM MAY 13TH TO AUGUST 12TH, 1889.		
		Average Actual Rainfall of Division.	Average Nor- mal Rainfall of Division.	Excess or Defect, in inches.	Average Actual Rainfall of Season to date.	Average Nor- mal Rainfall, May 13th to August 12th.	Excess or De- fect of (Season- al) Rainfall expressed as a per- centage.
		Inches.	Inches.	Inches.	Inches.	Inches.	Per cent.
BURMAH	Tenasserim	8'91	9'30	— 0'39	112'69	115'86	— 3
	Lower Burmah	3'70	4'87	— 1'17	42'73	58'12	— 26
	Central Burmah	3'47	4'32	— 0'85	31'97	46'60	— 31
	Upper Burmah	2'73	?	?	27'66	?	?
	Arakan	3'85	9'27	— 5'42	103'57	129'06	— 20
BENGAL AND ASSAM	Eastern Bengal	3'31	4'79	— 1'48	43'28	52'47	— 18
	Assam (Surma)	4'25	5'11	— 0'86	79'00	61'40	+ 29
	Do. (Brahmaputra)	2'15	3'07	— 0'92	51'14	44'38	+ 15
	Deltaic Bengal	1'62	2'86	— 1'24	28'38	31'45	— 8
	Central Bengal	1'40	2'53	— 1'13	29'16	30'09	— 3
	North Bengal	2'88	5'05	— 2'17	69'01	59'82	+ 15
	Orissa	2'91	2'50	+ 0'41	27'99	28'27	— 1
	Chota Nagpur	1'19	2'73	— 1'54	28'92	28'15	+ 3
	Behar (South)	0'99	2'86	— 1'87	24'42	23'88	+ 2
	Do. (North)	0'51	3'13	— 2'62	30'96	27'26	+ 13
NORTH - WESTERN PROVINCES AND OUDH.	North - Western Provinces (East).	0'61	2'49	— 1'88	23'35	20'15	+ 16
	Oudh (South)	1'08	2'31	— 1'23	24'40	20'50	+ 19
	Do. (North)	0'75	2'23	— 1'48	26'60	22'59	+ 18
	North - Western Provinces (Central).	1'21	2'05	— 0'84	15'41	17'92	— 14
	North - Western Provinces (West).	0'77	1'77	— 1'00	12'47	16'40	— 24
	North - Western Provinces (Submontane).	1'34	2'66	— 1'32	32'05	25'24	+ 27
PUNJAB	Punjab (South)	1'25	0'88	+ 0'37	7'39	8'44	— 12
	Do. (Central)	0'49	1'22	— 0'73	8'72	13'86	— 37
	Do. (Submontane)	2'45	2'23	+ 0'22	15'02	17'08	— 12
	Do. (Hill Districts)	3'55	6'80	— 3'25	46'69	52'45	— 11
	Do. (North-West)	2'05	1'82	+ 0'23	11'13	12'74	— 13
	Do. (West)	1'29	0'66	+ 0'63	4'82	4'88	— 1
BOMBAY AND MALA- BAR COAST DIS- TRICTS (MADRAS).	Malabar	5'81	3'76	+ 2'05	73'84	78'83	— 6
	Madras (South Central)	1'41	1'03	+ 0'38	18'58	9'05	+ 105
	Coorg	9'71	5'88	+ 3'83	64'30	66'39	— 3
	Mysore	0'27	0'92	— 0'65	8'35	11'18	— 25
	Konkan	6'89	4'54	+ 2'35	93'76	70'50	+ 33
	Bombay Deccan	1'17	1'61	— 0'44	15'12	18'89	— 20
	Hyderabad (North) . . . . .	...	...	...	...	...	...
	Khandeish	1'30	0'90	+ 0'40	10'39	12'83	— 19
CENTRAL PROVINCES AND BERAR.	Berar	4'66	1'42	+ 3'24	22'85	19'47	+ 17
	Central Provinces (West)	5'70	2'15	+ 3'55	25'84	24'45	+ 6
	Ditto (Central)	6'63	2'89	+ 3'74	34'71	32'57	+ 7
	Ditto (East)	5'57	3'42	+ 2'15	34'09	31'64	+ 8
BOMBAY (NORTH)	Guzerat	3'74	2'26	+ 1'48	25'78	23'78	+ 8
	Kattiawar	1'78	1'62	+ 0'16	22'07	18'40	+ 20
	Sind	0'42	0'55	— 0'13	1'14	3'18	— 64
RAJPUTANA AND CEN- TRAL INDIA.	Central India (East)	6'08	2'22	+ 3'86	24'25	22'20	+ 9
	Rajputana (East), Central India (West).	3'56	1'53	+ 2'03	18'27	15'15	+ 21
	Rajputana (West)	2'30	1'34	+ 0'96	6'56	7'90	— 17
MADRAS	East Coast (North)	1'80	1'01	+ 0'79	18'99	14'39	+ 32
	East Coast (North) (a)	3'36	4'66	— 1'30	16'60	18'83	— 12
	Hyderabad (South)	2'37	1'26	+ 1'11	11'73	11'90	— 1
	Madras (Central)	0'60	1'39	— 0'79	10'29	9'10	+ 13
	East Coast (Central)	1'07	1'05	— 0'58	10'21	10'00	+ 2
	Ditto (South)	0'31	1'04	— 0'73	10'60	7'45	+ 42
	Madras (South)	0'13	0'26	— 0'13	4'00	4'00	0

W. L. DALLAS,

SIMLA, 15th August, 1889.

Assistant Meteorological Reporter to the
Government of India.

E. C. BUCK,

Secretary to the Government of India.

GOVERNMENT OF INDIA.

REVENUE AND AGRICULTURAL DEPARTMENT.

Weekly Report on the State of the Season and Prospects of the Crops.

Madras.—*For week ending 10th August.*—Rainfall general; good in Ganjam, Vizagapatam, Godavari, Kistna, South Arcot, Tanjore, Nilgiris, South Canara, and Malabar. Crops generally good, but damaged by excessive rain in Vizagapatam and Godavari; affected by insects in parts of Anantapur, Coimbatore, and South Canara, and withering in parts of Tinnevely. Prices falling in many districts. Labourers employed on last day of week,—on Rushikulya works, 2,747; Gopalpore Canal, 1,183; Ghat Roads, 1,837; drinking-water tanks and wells, 1,905; minor irrigation and other works, 1,089. Returns incomplete. Number on village relief on 3rd August, 93,561; fed in kitchens, 10,163; total, 1,03,724—of whom, 56,358 were children and 32,477 were women. Imports during week by sea and land, 834 tons. General prospects favourable and greatly improved in Ganjam.

Bombay.—*For week ending 14th August.*—Rain during week general; more wanted in parts of Surat, Khandesh, Nasik, Poona, Ahmednagar, Satara, Belgaum, and Dharwar. Young crops suffering for want of moisture in parts of Shikarpur, Ahmednagar, Satara, and Belgaum; damaged by breaches in canals in parts of Hyderabad and by grasshoppers in parts of Ahmedabad. Standing crops otherwise good, except in two talukas of Khandesh. Sowing and transplantation progressing in several districts, but retarded in some for want of sufficient rain. Preparations for late crops progressing in Sholapur. Fodder scarce in parts of Nasik, Poona, Ahmednagar, Belgaum, and Dharwar. Drinking-water scarce in parts of Upper Sind Frontier, Nasik, Ahmednagar, and Dharwar.

Bengal.—*For week ending 13th August.*—The week has been marked by deficient rainfall, and more rain is wanted in many places and specially in Burdwan and Gya. Transplanting of winter rice is proceeding vigorously where there is sufficient water and has not yet suffered for want of rain anywhere. Early rice, jute, sugarcane, and *bhadoi* crops are generally doing well. Jute is being cut and steeped. In the affected tracts of Behar, *bhadoi* crops in the low lands of Durbhanga have been injured by floods, but the extent of damage has not yet been ascertained; in Muzaffarpur the damage done by inundation is more extensive in the Sadr Station, but the outturn of *bhadoi* is expected at over ten annas there. Number of persons receiving gratuitous relief is increasing. In Chumparun the floods are subsiding rapidly and the surviving crops doing well. Persons receiving gratuitous relief number over 1,000. In Bhagulpore prospects improving, but prices still high, being 12 seers 10 chittacks of rice per rupee. 343 persons employed on two relief works here. In Maldah much damage has been done by inundations; but the price of common rice has fallen. Food stock is sufficient everywhere in the Patna and Bhagulpore divisions. Indigo is doing well. At Contai in Midnapore rice sells at Rs. 2-9-3 per maund. Prices of foodgrains are high at Puri and Khurdah; but measures are being taken to provide labour in Chilka tracts and Khurdah. Floods are also reported from Purneah, Bogra, Dacca, and Backergunge.

North-Western Provinces and Oudh.—*For week ending 14th August.*—The weather generally has been favourable for agricultural operations, and the *kharif* is thriving, though more rain is wanted in rice-producing districts. Fodder is abundant. Markets fully supplied, and prices show no great variations.

Punjab.—*For week ending 14th August.*—General rain throughout the Province. Prices rising in Rawalpindi and Shahpur and stationary elsewhere. Ploughings for *rabi* commenced in Jullundur and Sialkot. *Kharif* sowings nearly over. Crops are flourishing. Standing crops are said to be in good condition. More rain wanted in Umballa, Lahore, and Shahpur. Stock cattle

are reported healthy, but suffering from insufficiency of fodder in Hissar. Fodder sufficient, except in Hissar.

Central Provinces.—*For week ending 14th August.*—Rainfall sufficient, except in parts of Jubbulpore. Good rain in Nimar, where there has hitherto been a deficiency. *Kharif* crops thriving and prospects favourable. Fodder sufficient. Prices steady.

Burma.—*For week ending 10th August.*—Heavy and seasonable rain fell throughout Lower Burma, except in Prome. More rain is still much wanted in Prome, North Tharrawaddy, and Toungoo. In the other districts agricultural operations progress favourably and standing crops are in good condition. In Upper Burma the rainfall was fair in Mandalay, Sagaing, Minbu, Yamethin, and Pyinmana districts, and light in Myingyan; elsewhere heavy rain fell. More rain is wanted in Myingyan, Minbu, Meiktila, and Pyinmana. Agricultural operations in Upper Burma progress favourably and the crops promise well, except in districts where the want of rain is felt, and in Bhamo and Shwebo, where damage has been done by insects. The price of paddy has again risen in Rangoon, where Rs. 125 was paid for 100 baskets. There was also a rise of 4 per cent. in Prome; 10 per cent. in Henzada; 3 per cent. in Moulmein; 4 per cent. in Minbu; and 17 per cent. in Meiktila. In Sandoway prices fell 20 per cent. and elsewhere were stationary.

Assam.—*For week ending 14th August.*—Rainfall varies from 0·25 in Khasi Hills to 7·31 in Sylhet. Reaping of early and transplanting of winter rice continue. Prospects of crops generally good, except in Goalpara, Nowgong, and Garo Hills districts, where some injury has been done by floods. Weather rather wet for tea in the Surma valley.

Mysore and Coorg.—*For week ending 14th August.*—Rainfall good in parts of the Shimoga and Hassan districts of Mysore and fair elsewhere. Crops good, except in parts of Kolar and Mysore districts, where more rain is wanted. Sowing and harvesting operations still continue in parts. Prices slightly fallen in Bangalore and risen in the Mysore districts.

Heavy rain in Coorg. Season continues favourable for transplanting paddy.

Berar and Hyderabad.—*For week ending 14th August.*—Rainfall average in Berar. Cotton and *jowari* crops are in good condition. Weeding operations continue. Prices of foodgrains unchanged. Agricultural stock good. Fodder sufficient.

Good rain in Hyderabad during the week. Sowing of *abi* and weeding of *kharif* crops still in progress. Water in tanks insufficient for *abi* and *tabi* crops. Prices stationary.

Central India.—*For week ending 14th August.*—Prospects in Central India, especially in the Bhopawar Agency, are good. Prices of foodgrains in Bundelkhand are falling and prospects of outturn improved. Agricultural operations completed in Goona.

Rajputana.—*For week ending 14th August.*—Rainfall good throughout the Province; heavy in Jhallawar and Abu. Agricultural operations and standing crops satisfactory. Agricultural stock good. Pasturage or fodder sufficient. Prices falling in some places.

Nepal.—*For week ending 8th August.*—Good rain. Weather fair. Winter rice progressing. Prospect of Indian corn generally good.

E. C. BUCK,

Secretary to the Government of India.

GOVERNMENT OF INDIA.
HOME DEPARTMENT.

EXECUTION OF CONTRACTS.

No. 1142—43.

Extract from the Proceedings of the Government of India in the Home Department (Judicial),—under date Simla, the 16th August, 1889.

Read again—

Home Department Resolution No. 1750, dated the 2nd November 1876, on the subject of the execution of minor contracts and deeds on behalf of the Secretary of State for India in Council.

Read—

A letter from the Government of Bengal, No. P^C6, dated 11th July 1889.

RESOLUTION.

In exercise of the power conferred by the thirty-third and thirty-fourth of Victoria, Chapter fifty-nine, section two, the Governor General in Council is pleased to declare, in extension of the orders contained in the Resolution of the 2nd November 1876, that the undermentioned class of contracts referred to in the twenty-second and twenty-third of Victoria, Chapter forty-one, section two, may be executed as follows in the territories under the administration of the Lieutenant-Governor of Bengal:

Contracts for the supply of articles procured in the local markets for hospitals, lunatic asylums, &c.	} By the local Medical Officers in charge of such hospitals, asylums, &c.
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ORDER.—Ordered, that this Resolution be communicated to the Government of Bengal for information, and be published in the Supplement to the *Gazette of India*.

[True Extract.]

A. P. MACDONNELL,
Secretary to the Government of India.

DISCIPLINE AND MORAL TRAINING IN SCHOOLS AND COLLEGES IN INDIA.

No. ⁶_{371—393}.

Extract from the Proceedings of the Government of India in the Home Department (Education),—under date Simla, the 17th August, 1889.

Read again—

Home Department letter Nos. 10-382-391, dated 31st December 1887, to all Local Governments and Administrations.

Read replies—

From the Government of Madras, No. 421, dated the 16th July 1889.
From the Government of Bombay, No. 985, dated the 2nd October 1888.
From the Government of Bengal, No. 183, dated the 26th February 1889.
From the Government of the North-Western Provinces and Oudh, No. ^{900E.}_{III-203-6}, dated the 18th July 1888.
From the Government of the Punjab, No. 146, dated the 25th July 1888.
From the Chief Commissioner, Central Provinces, No. ²⁶⁴⁶₁₁₀, dated the 10th May 1888.
From the Chief Commissioner, Burma, No. 659-11E., dated the 26th March 1889.
From the Chief Commissioner, Assam, No. 4815, dated the 31st August 1888.
From the Chief Commissioner, Coorg, No. 931-685, dated the 28th May 1888.
From the Resident at Hyderabad, No. 259G., dated the 30th June 1888.

RESOLUTION.

In the letter addressed by the Home Department to Local Governments and Administrations on 31st December 1887, their attention was drawn to the

growth of tendencies unfavourable to discipline, and favourable to irreverence, in the rising generation in India; and the Governor General in Council formulated for the consideration of Local Governments and Administrations certain suggestions with the object of counteracting these tendencies. The recommendations related both to schools and colleges. For the former it was suggested—

- (1) that gymnastics and field exercises should be recognized as part of a regular course of school training, and that a system of marks and prizes for efficiency in gymnastics should be introduced;
- (2) that punishments for breaches of discipline should be arranged so as to fall on the offender, and that with this aim the imposition of tasks, deprivation of privileges, a judicious use of the rod in the case of young pupils, and finally expulsion in cases of aggravated and persistent misconduct, are more suitable forms of punishment than fines;
- (3) that good conduct registers should be prescribed, extracts from which should be sent to the parents and guardians of the boy at stated intervals with the definite opinion of the head master on his character and behaviour, and that prizes for good conduct should be awarded at the end of each year;
- (4) that hostels and boarding houses should be established at the larger schools and colleges in large towns and cities for the accommodation of students whose families are not resident in the place where they are being educated;
- (5) that selected boys from the higher classes of schools should be appointed monitors for the purpose of maintaining discipline during, and as far as possible out of, school hours;
- (6) that any boy who through want of diligence and attention to study fails to rise to a certain class by the time he has reached a certain age should be required to leave the school;
- (7) that inter-school rules, defining the conditions under which pupils should be allowed to pass from one school to another, should be extended to all schools aided or supported by public funds, as a condition of the continuance of such aid; and that the Senates of the Universities should be invited to use their influence to procure the adoption of this system in schools and colleges which do not receive aid from Government;
- (8) that the provision of efficient training schools and colleges for teachers should be made a first charge against the educational grant; that the employment of teachers in all schools should be gradually restricted to those who have given satisfaction during a course of training; and that trained head-masters should be introduced from England for definite periods of five to seven years for selected schools; and
- (9) that teaching having a direct bearing upon personal conduct should be more generally resorted to. The Government of India, while admitting that this is provided for in some aided schools by religious instruction, and that even in some State schools religious instruction can under well-recognized restrictions be granted out of school hours, considered that this was not sufficient; and it therefore, in concurrence with the Secretary of State, desired that consideration should be given to the proposal of the Education Commission that an attempt should be made to prepare a moral text-book based on the fundamental principles of natural religion.

In regard to methods for encouraging respect for authority in colleges, it was pointed out by the Government of India that an improvement in this matter in schools would naturally reproduce itself in colleges, which students would enter with habits formed and characters developed by the wholesome discipline of the schools. The Governor General in Council, however, pressed that an effort should be made to impart moral instruction in colleges, and with a view to

improving the supervision of Principals and Professors over students in colleges, suggested the adoption of the following regulations :

- (a) that weekly meetings should be held by the Principal and the Professors to consider questions of discipline ;
- (b) that the Principal should have the power of ordering the expulsion or rustication of a student, and of fining him for disorderly conduct ; and
- (c) that every Professor should have the power of suspending a student for a limited period of time, and of fining him without reference to the Principal.

2. The Government of India has now been placed in possession of the views of Local Governments and Administrations on the foregoing suggestions. There is substantial agreement both among officials and the representatives of the native community as to the existence of the evils which have been indicated. The tendency towards irreverence and disregard of authority has no doubt gone further in some parts of India than it has in others. But most of the conditions which have favoured its growth in the parts of India where it is most prevalent are in a greater or less degree noticeable in other less forward portions of the country ; and the Governor General in Council entertains no doubt that remedies are necessary in those places in which the work is at present one of prevention, as well as in those in which it is one of cure. His Excellency in Council thinks that no profit will result from any further discussion as to how far the present state of things is due to defects in the system of education, and how far to forces either independent of, or antagonistic to, that system. The evil is admitted on all hands ; and the problem is to find means by which the method of public instruction may be strengthened and improved so as to combat and overcome it. Holding these views, the Governor General in Council considers it matter for congratulation that Local Governments and Administrations and the representatives of the different native communities in India have generally accepted his suggestions with cordiality, and shown, by the earnest attention which they have devoted to the subject, their determination to remove the defects which have been brought to notice

3. In proposing remedies for the evils admitted to exist, many Local Govern-

The Government of India recognizes its responsibility to provide, so far as its finances permit, facilities for the education of the people. But in educational as in all other matters it is the policy of the Government of India to avoid entering into competition with private enterprise ; it pioneers the way ; but having shown the way, it recognizes no responsibility to do for the people what the people can, and ought to, do for themselves. When therefore local effort or private enterprise shows itself able and willing to supply the educational wants of the people in any locality, it is the policy of Government to retire from the field of direct instruction, and to help by reasonable subventions of money the operations of independent institutions. Under this policy, it is the aim of the Government also, wherever there is vitality of private effort, to restrict official action to the maintenance of a few schools in which the system of instruction and discipline shall afford a standard for the emulation of private or aided institutions in the neighbourhood. In pursuance of this policy, the expenditure from Provincial revenues on Government educational institutions should not ordinarily increase in proportion to the total expenditure, but should rather be a constantly diminishing quantity ; provided that there is the assurance that the ground abandoned by the Government is occupied by local effort.

ments and Administrations have felt themselves fettered by the want of funds, and their recommendations are consequently in some cases not so far-reaching as they doubtless would have been if financial difficulties had not interfered. In the matter of expenditure on public instruction in India the Governor General in Council desires to reaffirm the policy laid down in paragraph 17 of the Home Department Resolution No. 199 of 18th June 1888, reviewing Sir Alfred Croft's Report on Education in India, and in accordance with that policy to state that the recommendations which follow, so far as they involve expenditure, should be carried into effect without imposing any additional burden on Provincial finances. Where the funds necessary for the improvements suggested

cannot be provided from local sources or private benevolence, they should be obtained by an enhancement of fees or by curtailing and readjusting existing expenditure.

4. Proceeding to deal with the suggestions enumerated in paragraph 1, the Governor General in Council observes that in Madras much has been done under the auspices of the Physical Training Association, and measures are under consideration in that Presidency with a view to making it a condition of aid or recognition that the organization of a school satisfies certain prescribed requirements in

regard to a gymnastic course, school drill, and the maintenance of play-grounds. In Bombay a liberal grant-in-aid is to be given to the Bombay Gymnastic Society, which will provide for High schools in that city, while the question of providing for High schools elsewhere in the Presidency is being considered. The Bengal Government engages to provide play-grounds and gymnasia so far as funds admit; and the proposals of the Indian Association that Government should supply gymnastic apparatus to all Government schools, that teachers of athletic sports should be appointed, and that a general competition in athletic sports should be arranged every year in district head-quarters, are receiving consideration at the hands of the Educational authorities. In the North-Western Provinces and Oudh the question of physical education has lately been considered by a Conference of Educational officers; and His Honour the Lieutenant-Governor and Chief Commissioner engages to consider with favour any practical suggestions that may be made. In the Punjab it is intended to prescribe gymnastic courses for primary, middle, and high schools, and to permit boys to present themselves annually for examination in gymnastics, and to receive certificates if successful. Cricket and athletic tournaments, open to Government and aided schools and unaided schools subject to Government inspection, are to be promoted. In the Central Provinces all secondary and many of the primary schools have gymnastic apparatus, and the boys are drilled at all secondary schools. In Burma physical exercise is so congenial to the tastes of the people, that special encouragement is not necessary to stimulate the boys to take part in athletics. In Assam gymnastic apparatus has been provided at most of the High schools; and it is further intended, if funds will admit, to appoint three teachers of gymnastics to visit the High schools in rotation, and to give a capitation allowance for proficiency. In the Hyderabad Assigned Districts gymnasia and teachers of gymnastics have been provided in many schools. The information thus summarized gives satisfactory proof that the Local Governments and Administrations appreciate the value of physical exercises, and are ready and willing to encourage them; and it is believed that much can be done in this direction without incurring any large expenditure. As a corollary to the action already undertaken, or about to be undertaken, to promote physical education, a system of marks and prizes, which no doubt will be largely supplied by private liberality, for proficiency in gymnastics and athletic sports, should be everywhere introduced where gymnasia and play-grounds have been attached to the schools; and the Governor General in Council trusts that Local Governments and Administrations will on suitable opportunities endeavour to make arrangements to carry this suggestion into effect.

5. In indicating its views on the punishment of breaches of school discipline in paragraph 14 of the letter of 31st December 1887, the Governor General in Council left this question to the judgment and discretion of Local Governments and Administrations. At the same time he drew prominent attention to the suitability of corporal punishment as a punishment for boys who have not reached an age when such punishment becomes inappropriate, and where local sentiment is not very pronounced against it. It appears from the replies now received that corporal punishment is generally recognized as suitable in cases of aggravated misconduct. The prevailing opinion also is strongly against the abolition of the system of fining, which is defended as being helpful towards securing punctual attendance. His Excellency in Council accepts the general opinion on both points, and desires that effect should be given to it. Without desiring that a code of offences and punishments should be drawn up to which every breach of discipline should be directly reducible, His Excellency in Council considers that punishments in schools and colleges should take such forms as loss of position in the class, impositions, exclusion from lessons, suspension from attendance, money fines, corporal punishment, and, as a final resource, expulsion. It will be for the various Local Governments and Administrations acting through their Educational Departments to lay down for the guidance of masters such rules as may be considered desirable to enforce a discreet use of the different forms of punishment.

6. The suggestion for the maintenance of good conduct registers has been generally well received. The Bengal, North-Western Provinces and Oudh, and Central Provinces Governments agree to the introduction of such

registers in the manner proposed in the Home Department circular letter. In Bombay the experiment is to be tried under selected head-masters. In Burma registers are to be opened in all Government schools; in time they may be prescribed in aided schools, but in this Province it seems premature to insist on this at present. In Assam a start has already been made in keeping good conduct registers, in giving prizes for good conduct, and in making every boy appear periodically before the head-master; and the system is to be further extended. In the Punjab the authorities are opposed to opening good conduct registers, and to giving prizes for good conduct; but they propose to attain the objects in view by directing that certificates are to be given for good conduct, and that serious cases of bad conduct are to be reported to the parent or guardian of the offender. The Government of Madras is adverse to the system on the ground that the moral defects of students and of schoolboys are not such as can be marked by registers of conduct, and deprecates the suggestion that attention should be given to good conduct registers in selecting candidates for the public service on the ground that it would be cruel and unjust to place on permanent record the faults committed in early youth. While admitting that there is force in the last objection, the Governor General in Council considers that it may be met by head-masters refusing extracts of the earlier entries in the registers which would produce an unfair impression of the pupil's real character, or adding such remarks as would prevent their having this effect. Generally speaking, extracts from these registers of conduct, although not conclusive as to a boy's conduct except during school hours, will obviously afford more useful information to employers to whom he offers his services than the certificates of character now generally given; and from this point of view they will probably not be without their use to Government officers in selecting candidates for the public service. His Excellency in Council therefore trusts that the Governments of Madras and the Punjab will follow the example of other Provinces by introducing a system of good conduct registers.

7. The advantages of well-conducted boarding houses attached to the higher schools and colleges for students who do not live with relations or friends, at which the example and personal influence of their teachers can be brought to bear upon the students out of school hours, are generally recognized. The obstacle which has generally prevented the extension of the system is the expense which it involves. The Madras Government would be glad to see the experiment tried by private agency, but considers its success too doubtful to justify the expenditure on it of public funds. In Bombay provision will be made at the few Government colleges that exist for the enforcement of stricter discipline and for the residence at or near the college of the Principal or a Professor. The further extension of the residential system will be left to private liberality. The establishment of hostels is an essential part of the educational policy of the Governments of Bengal and Assam, where funds are available; and the public has occasionally contributed towards such foundations. In the North-Western Provinces and Oudh every district school and college has a boarding house attached to it, and they are all full. Sir Auckland Colvin is not in favour of the extension of the system to schools at the head-quarters of tahsils, because he is not satisfied that they would be properly supervised. In the Punjab the boarding house system is very widely extended; and the Lieutenant-Governor contemplates authorizing local bodies to require that out-students attending a school to which a boarding house is attached should live in it provided there is accommodation, unless they are living with relatives or friends of their parents or guardians and are considered by the head-master to be under healthy influences. In the Central Provinces local bodies will be requested to improve or enlarge existing boarding houses where the accommodation is bad or insufficient. In Berar several boarding houses with accommodation for resident masters have been established, and it is proposed to increase their number. The Governor General in Council recognizes the willingness of Local Governments and Administrations to do what is required in the provision of boarding houses. The State already bears a disproportionate share of the expenditure on high education; and the obligation of providing boarding houses where they do not exist is one which Local Governments and Administrations

are naturally loth to accept. It is an appropriate object for private liberality, which should be encouraged to regard it as worthy of its benefactions.

8. It was admitted in the Home Department letter of 31st December 1887 that the monitorial system cannot be as effectual an aid to discipline in India, where schools are mostly day schools, as it is in England. At the same time His Excellency in Council believes that the adoption of rules, such as the Elphinstone High School Rules referred to in paragraph 17 of the letter, will be found productive of advantage. The essence of these rules is the independent power of punishment given to Prefects, which is thus referred to by Mr. Jacob, who introduced the system into the Elphinstone High School:

"It is the delegation of this disciplinary power to the Prefects that emphatically marks the trust reposed in them, and brings them, to look upon the reputation and prosperity of the school as partly committed to their keeping. If you withhold this power, and require the Prefects not to preserve discipline but merely to report breaches of it to the masters, you reduce the Prefects to the position of mere tale-bearers. Self-government becomes government by espionage, and with a decided tendency to develop nothing but ignoble traits of character in those who are allowed to play no higher part in it than that of menials."

In Bombay the Elphinstone Rules are to be circulated, and an attempt made to introduce the system in High schools generally. In Bengal the monitorial system will be tried in hostels and subsequently extended, if successful. In the North-Western Provinces and Oudh and in Assam it will be tried in selected schools. In the Punjab, the Central Provinces, and Berar the system is recognized already, especially in the Punjab: it is to be extended in the Central Provinces and Berar. On the whole, the Government of India is satisfied with the manner in which Local Governments and Administrations have accepted its suggestion on this matter. Time will show whether the system is well-suited to Indian boys, and with the improvement of the quality of teachers it will be possible to extend it generally, if it is found to succeed in the better schools.

9. On the proposal to enforce the exclusion from school of boys who do not reach a certain class by a certain age the general opinion is, that a rigid application of a rule of this nature would involve the risk of injury to classes of society whose backwardness requires encouragement. The Governor General in Council recognizes the force of this argument; and as he thinks that there is not the same objection to big and small boys being associated together at day schools as there is at boarding schools, His Excellency in Council is content to leave the matter to Local Governments and Administrations, on the understanding that the recommendation in paragraph 18 of the letter of 31st December 1887 will not be lost sight of.

10. The question of inter-school rules is one of great importance in the interests of discipline, and rules on the subject are already in force in nearly every Province. The points which it is essential to secure are, that, without the consent of the Educational authorities, a boy shall not be taken into a school who has been dismissed from another school for misconduct; that failure to pay his school fees in his former school shall debar a boy from admission to another school, except under similar consent of the Educational authorities; and that, if received into another school, a boy shall not be placed in a higher class than the class he was in before leaving the other school, except at the beginning of a new term. The rules on the last point should only be applicable to schools of the same grade: those on the first and second points would be generally applicable to schools of all grades.

The rules in the Madras and Bombay Presidencies are too exclusively directed towards the second of these objects. Those in Bengal and the North-Western Provinces and Oudh seem to give more or less effect to the three essentials; but the point of dismissal for misconduct might be brought into greater prominence even in these Provinces. In the Punjab rules have been prepared which apply to all Government and aided schools; but it is not proposed to ask the University to co-operate on the ground that the number of unaided schools and colleges in the Province is very small. In the Central Provinces there are no inter-school rules at present, and it is proposed to introduce simple rules

to apply to schools in the same town. This limitation, however, seems calculated to diminish the effect of the rules, and should be reconsidered by the Chief Commissioner. The rules in Burma apply to all Government schools and aided schools of the advanced kind. They are defective in that they contain no reference to conduct. Revised rules are being issued in Assam, which, if acted upon by the managers of unaided schools, will go far to meet the objects which the Government of India has in view.

The Governor General in Council considers that it is desirable to remodel the rules of other Provinces on the basis of the rules in force in Bengal and the North-Western Provinces and Oudh (which are printed as an Appendix to this Resolution). The Education Department can enforce such rules in all Government colleges and schools, and their adoption can be made a condition of a grant-in-aid from Government; but it is equally essential that they should be adopted in unaided institutions. The only effectual way of securing this is to invite the co-operation of the University; as has been done in the North-Western Provinces. When the Provincial rules have been revised and determined, the Universities should be invited to assist towards securing their adoption in unaided institutions by denying affiliation to such as do not adopt them; and the Governor General in Council earnestly trusts that, when invited, the Universities will throw the weight of their great influence into the scale of order and discipline.

11. In the opinion of the Governor General in Council the provision of efficient training schools and colleges for teachers is one of the most effective means available to Government for improving discipline and counteracting the tendency to irreverence and contempt of authority; and he has accordingly considered with special attention the opinions which the various local authorities have expressed upon this important subject.

In Madras there are at present arrangements for training in the Government and public normal schools about one-third of the teachers required for colleges and secondary schools and three-quarters of those required for primary education. The quality of the training, however, needs improvement; and this question, as well as that of extending the training system so as to provide teachers for all schools, is engaging the attention of the Madras Government. The University also holds an examination for the degree of Licentiate in teaching. The Bombay Government is ready to provide an adequate supply of training schools for primary institutions, but considers that the cost of training colleges for preparing masters for high and secondary schools would be prohibitive, and that the need for such institutions is not great. It admits, however, that teachers are now appointed to schools without any real knowledge of the art of teaching, and proposes to establish normal classes at the large high schools and to compel candidates for service in the Department to attend them. The Bengal Government, on the ground that the education of teachers is costly and that the educational grant is insufficient to adequately provide for elementary and technical education, states that there is no present prospect of funds being available for the general introduction of a system of training teachers for their profession in special institutions. His Honour the Lieutenant-Governor believes that training in the art of teaching should be given in addition to, and not as a substitute for, the education of the University; and urges that there is no want of masters trained in the usual English method at the University, and that it is on this ground and on the ground of expense undesirable to import English masters for definite periods. His Honour is prepared, should the Government of India wish it, to start one training school at a cost of about Rs. 10,000 a year for English teachers at high and middle schools, Government or aided. Sir Steuart Bayley also expresses himself in favour of a system of granting certificates in the art of teaching in preference to an extension of normal schools; the possession of such certificates to be made a condition of employment in Government and aided schools. In the North-Western Provinces and Oudh considerable attention has been devoted to the training of masters, and a normal school for teachers in primary and middle institutions is located at the head-quarters of each division. It is found, however, that present arrangements do not adequately provide for the training of masters for the higher

class of schools, and it is proposed to establish a central institution for this purpose. In the Punjab there is a central training college at Lahore for masters in secondary schools. No one can be employed in any board school, whether secondary or primary, who does not hold a teacher's certificate. The amount of grants to aided schools is to a certain extent dependent on their having certificated teachers. In the Central Provinces sufficient provision for training vernacular teachers is said to exist. The Anglo-Vernacular teachers are supplied by the colleges. The Chief Commissioner is in favour of establishing normal classes for Anglo-Vernacular masters and arranging for examination for certificates in teaching, and he has under consideration suggestions for the improvement of the normal schools at Jabalpur and Nagpur. In Burma, where education has a strong religious character, adequate arrangements for training masters for primary schools exist; and the Chief Commissioner is working out a scheme for attaching to existing schools departments for the training of middle class teachers. The supply of trained teachers for secondary schools in Assam must be procured by indenting on normal schools in Bengal when established, or by sending teachers from Assam for training in those schools. In Berar arrangements have been made for training teachers for primary schools; but the secondary schools are not numerous enough to justify a special training institution, and masters for these schools are procured from Bombay colleges and high schools.

12. The Governor General in Council desires to give emphatic expression to his view, that it is of little use to spend money on schools if the teachers are either inefficient or unable to maintain discipline or a healthy moral tone in their schools. The chief qualifications required in a schoolmaster are capacity to maintain discipline, and capacity to convey instruction. The first of these qualifications implies firmness and ability to govern, the capacity of inspiring enthusiasm in his pupils and securing their co-operation, and earnestness, sympathy, and insight into character. In the opinion of the Governor General in Council the possession of these qualities cannot be tested merely by an examination such as is suggested by the Government of Bengal. The capacity to convey instruction comes more within the range of an examiner's power to test. But this is the lower of the two sets of qualifications which go to make up the model schoolmaster; and an examination is an admittedly inferior way of ascertaining a teacher's ability to convey instruction, his ability to simplify a subject, or his skill to fix the attention and draw out the intelligence of his class. For these reasons the Governor General in Council considers it impossible to secure good instructors without such a process of selection and preparation as normal school training gives, and is unable to regard the adoption of examination in the art of teaching as an adequate substitute for good normal schools. His Excellency in Council therefore deems it essential that each Local Government should accept the responsibility of providing means for training teachers for each grade of schools—primary, middle, and high—as a first charge on the Educational grant. Should any Local Government find itself unable to provide the requisite system of training from the funds already available, it should arrange either to increase its funds from local sources or, following the recommendation of the Education Commission in paragraph 543 of its Report, to throw more largely on private enterprise the duty of providing higher education, and thereby set free the money required for training institutions. The proposal to attach normal classes to the larger High schools, though not as satisfactory as the establishment of training schools themselves, is nevertheless worthy of consideration, if it be arranged that such classes shall be attached to those High schools only which are under the care of specially selected and competent masters. As the number of good teachers educated at training institutions increases, it should gradually be made a condition that no uncertificated teacher should be appointed to a Government aided school or college; and the Universities should be invited to make the employment of certificated teachers in unaided schools and colleges a condition of affiliation. Until the supply of training institutions is fully developed, local arrangements should be made whereby provisional certificates of competency to teachers possessing certain educational qualifications may be granted after a sufficient period of probation has been passed, subject to confirmation by the Government Inspector.

13. In the opinion of the Governor General in Council the suggestion (which chiefly affects the larger Provinces) contained in paragraph 11 of the letter of 31st December 1887, that trained head-masters should be engaged from England for a definite period of five to seven years in order to introduce and establish a standard of discipline for the emulation of other schools, is deserving of careful attention. The Madras Government thinks that the teaching staff at colleges should be leavened by a larger proportion of English teachers, who have paid special attention to the art of teaching; and, at its request, the Secretary of State will be invited in selecting graduates for educational appointments in India to insist on their possessing experience in teaching. In the North-Western Provinces and Oudh the question of employing European masters for a few of the leading schools for limited periods is, the Government of India is pleased to learn, under consideration. The Governor General in Council is convinced of the valuable stimulus that the example of good teachers from England would give to schools; and he would be glad if the Bombay, Bengal, and Punjab Governments could see their way to giving the proposal their further consideration.

14. There remains the question of the extension of a system of teaching which has a direct bearing upon personal conduct, and whether an attempt to effect this extension should be made by prescribing moral text-books for schools and colleges.

Having given this important question its fullest consideration, the Government of India is satisfied that the end in view would not be attained by prescribing for use in colleges and schools a treatise on ethics or a book of didactic instruction in the rules and principles of conduct. It believes that the careful selection and training of teachers provide the most effectual method of establishing a good moral tone in a school; but it also considers that the influence of the teacher may be greatly strengthened and the interests of morality promoted by the use in schools of text-books having a direct bearing on conduct, either by means of precept or example. The Government of India understands that this view has commended itself to the Syndicate of the Calcutta University, under whose auspices Mr. Tawney, Principal of the Presidency College, has been engaged to prepare a book of selections for the use of candidates for matriculation. The instructions laid down for Mr. Tawney's guidance in preparing this book are, first, that at least three-fourths of the book shall consist of prose taken from authors of the present century; second, that at least one-half of the prose portion shall consist of extracts having a direct bearing on conduct, either by way of precept or example; and third, that a similar principle shall be as far as possible kept in view in the poetical selections. Thus, the Calcutta University has already taken steps to give effect to what, in the opinion of the Government of India, is the most practical way of introducing moral training into the highest class of Indian schools, and furnishing teachers with the opportunity of imparting instruction in morality and in the principles of natural religion to their pupils. All that remains now to be done, in Bengal at all events, is to supplement this action of the University by providing for the lower grades of schools, and for each class in those grades suitable text-books compiled on similar lines. Similar action in other Provinces is equally called for; and accordingly the Governor General in Council desires that each Local Government and Administration should take this matter at once in hand; and either by the appointment of a Committee or by employing selected individuals, who need not necessarily be officials, or by the offer of suitable prizes, effect a revision of the existing Readers in the direction indicated above, or where necessary procure for use in schools an entirely new set of books compiled on these principles. His Excellency in Council will be glad to learn from time to time the progress made in each Province in this undertaking.

15. The suggestions enumerated in paragraph 1 of this Resolution, for the improvement of discipline in colleges, have received favourable consideration by Local Governments and Administrations. In Bombay and the Central Provinces the rule as to weekly meetings of college councils will be adopted. In Bengal and the North-Western Provinces and Oudh the rule is considered unnecessary; and in the Punjab fortnightly meetings have been prescribed. The rule empowering a Principal to expel, rusticate, or fine a scholar is accepted everywhere. The rule giving power to a Professor to suspend a student for a limited time, or to fine him without reference to the Principal, is accepted by Bombay, Bengal, and the Central Provinces.

In the Punjab it is definitely restricted to students of the Professor's own class; and it is understood that this limitation is also contemplated in the three Provinces just mentioned. The Governments of Madras and the North-Western Provinces and Oudh favour the autocracy of the Principal in matters of discipline. The Government of India is content with the measure of acceptance which its suggestions as to colleges have met, and does not wish to press them further on the Governments which have not found themselves able to adopt them.

ORDER.—Ordered, that a copy of the above Resolution be forwarded to all Local Governments and Administrations for information and guidance; and to the Foreign and Public Works Departments for information and such action as may be considered necessary in regard to Educational institutions under the control of those Departments.

Ordered also, that the Resolution be published in the Supplement to the *Gazette of India*.

[True Extract.]

A. P. MACDONNELL,

Secretary to the Government of India.

APPENDIX.

Inter-School Rules in force in Bengal and the North-Western Provinces and Oudh.

Bengal.—I.—A boy, before he is admitted to a high school, shall be required to produce a certificate from the head-master of the last school in which he was reading. Whenever possible, a parent or guardian should accompany the boy; in other cases he should provide the boy with a letter of application.

II.—The certificate shall run as follows:

“CERTIFIED that _____ was in the _____ class of the _____ school and leaves with a _____ character. All sums due by him to this school have been paid.”

III.—The certificate is to be given upon the day in which it is asked for, and it is not the business of the head-master to inquire why the boy wishes to leave his school.

IV.—A boy coming for admission shall not be placed in a higher class than that in which he was in the school he has left (no class lower than the fifth being considered): thus, a boy of the fifth class of one school may not be admitted into the fourth class of another school, but a boy of the sixth class may be admitted into the fifth class without an infringement of this rule.

N.B.—To promote a newly-admitted boy, except it be after the regular annual examination of the school, is a breach of this rule. By the “regular annual examination” is to be understood the examination held towards the close of the school-year, when the Entrance test-examination is generally held.

V.—The fact of a boy appearing for admission without having undergone the annual examination of his old school must be regarded, unless the reverse is certified to by his former head-master, as sufficient evidence of his not having been fit for promotion; he should therefore be admitted into the class in which he had been reading in the other school.

VI.—Every case in which a boy is dismissed or expelled should be notified at once to the Inspector of Schools.

VII.—If a boy's name be struck off for non-payment of dues, he shall not receive a certificate until all sums due to the school have been paid.

VIII.—If a boy leaves the school after having failed at the examination of his class, a note to that effect shall be entered in the certificate granted to him by the head-master.

IX.—All questions arising between one head-master and another respecting the enforcement of these rules shall be referred to the Inspector of Schools with all convenient speed.

X.—If a boy be found producing a false certificate, or making a false statement as to his attendance at any school, he shall be expelled or, at the discretion of the Inspector, be publicly degraded for that year to the class below that in which he is.

XI.—Wilful transgression of any of the foregoing rules will render a school liable to forfeit the right to send up candidates for junior scholarships.

North-Western Provinces and Oudh.—The rules in force are to the following effect:

That a boy on admission to a secondary English School, Government or aided, shall, except for some sufficient reason to the contrary, remain at the same school till the end of the school year, and that, if obliged to leave within that time, he shall receive a certificate showing what stage of education he has attained, and what character he bore; that if he leaves at the end of the school year, the master shall give him a written certificate showing whether he has passed or failed at the final examination; that the grant of any certificate shall be made conditional on his having paid all sums due by him to the school he is leaving, and that he shall not be admitted to another school except on the production of one of the above certificates. He will not be placed in a higher class in his new, unless he has passed the final examination at his previous school, and will not receive promotion within three months of his admission.

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
RAILWAY TRAFFIC.

No. XVI. OF 1889-90.

APPROXIMATE STATEMENT OF GROSS RECEIPTS AND EXPENSES OF INDIAN RAILWAYS.

N.B.—As regards the figures in column *Total Receipts from 1st April to date*, audited figures have been used as far as possible.

Latest Return received.	RAILWAYS.	WEEK ENDING 21ST JULY, 1888.		WEEK ENDING 20TH JULY, 1889.		TOTAL RECEIPTS FROM 1ST APRIL TO 21ST JULY, 1888.		TOTAL RECEIPTS FROM 1ST APRIL TO 20TH JULY, 1889.		Total increase in 1889-90.	Total decrease in 1889-90.		
		Total mean length open.	Receipts.		Total mean length open.	Receipts.		Total.	Per mile open per week.			Total.	Per mile open per week.
			Total.	Per mile open.		Total.	Per mile open.						
	<i>State Lines worked by Companies.</i>		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		
3rd August, 1889	East Indian	1,514	7,51,688	497	1,514	7,57,255	500	1,39,92,229	578	1,42,56,029	589	2,63,800	
3rd ditto	Patna-Gya	57	7,125	125	57	7,790	136	1,33,150	145	1,36,345	149	3,195	
3rd ditto	Dildarnagar-Ghazipur	12	644	54	12	764	64	17,804	93	15,668	82	2,136	
	Sindia	75	7,718	103	...	(a)	...	1,29,291	108	(a)	...	1,29,291	
27th July, 1889	Rajputana-Malwa	1,664	2,26,509	136	1,664	2,62,000	157	60,99,300	229	68,73,197	260	7,73,897	
27th ditto	Bengal-Nagpur (b)	186	17,348	93	305	(c) 21,526	71	5,71,149	192	(c) 6,67,966	141	96,817	
27th ditto	Southern Mahratta (d)	850	71,483	84	857	79,164	82	12,72,672	94	13,98,831	102	1,26,159	
27th ditto	Do. Mysore Section	140	9,705	69	219	12,105	55	1,66,083	74	2,24,113	64	58,030	
20th ditto	Indian Midland	136	9,213	68	668	(e) 47,454	71	2,55,649	117	(e) 9,29,769	95	6,74,120	
20th ditto	Villupuram - Dharma- veram (Nellore Branch)	83	3,483	42	83	4,624	56	79,844	60	78,668	60	1,176	
20th ditto	Bareilly-Pilibhit	36	1,526	42	36	1,633	45	25,521	47	33,015	61	7,494	
	TOTAL	4,753	11,06,442	233	5,415	11,85,315	279	2,27,42,692	299	2,46,13,601	290	18,70,909	
	<i>State Lines worked by Government.</i>												
27th July, 1889	North Western (f)	2,411	3,82,663	159	2,386	4,76,455	200	75,92,767	197	85,03,984	225	9,11,217	
27th ditto	Oudh and Rohilkhand	692	96,807	140	692	1,35,591	196	24,09,874	217	26,69,707	241	2,59,833	
20th ditto	Bengal Central	125	9,970	80	125	12,420	99	1,93,441	97	2,20,596	110	27,155	
27th ditto	Wardha Coal	45	13,564	301	45	13,934	310	2,34,200	325	2,70,767	379	36,507	
20th ditto	Eastern Bengal Rail- ways	673	1,28,711	191	747	1,53,280	205	23,43,847	218	25,52,433	232	2,08,586	
3rd August, 1889	Nalhati	27	1,465	54	27	1,471	54	31,076	76	30,404	74	672	
3rd ditto	Tirhoot	259	24,928	96	273	37,437	137	5,77,658	149	6,21,135	152	43,477	
27th July, 1889	Lucknow-Sitapur- Sihramau	105	3,440	33	105	6,217	59	85,668	51	1,12,989	67	27,321	
20th ditto	Jorhat	25	1,594	64	25	1,207	48	17,339	38	18,124	38	785	
20th ditto	Cherra-Companyganj	...	(g)	...	7	118	16	1,140	10	1,560	13	420	
20th ditto	Burma	392	43,126	110	553	66,887	121	9,70,125	161	15,01,038	171	5,30,913	
	TOTAL	4,754	7,06,268	149	4,985	9,05,017	182	1,44,57,135	190	1,65,02,737	211	20,45,602	
	<i>Lines worked by Guar- anteed Companies.</i>												
27th July, 1889	Madras	840	1,54,898	184	840	1,68,350	200	26,29,975	196	29,16,379	219	2,86,404	
20th ditto	South Indian	654	1,01,360	155	654	1,06,793	103	17,57,589	168	18,64,545	180	1,06,956	
27th ditto	Great Indian Peninsula	1,497	(h) 5,09,945	341	1,440	(i) 4,06,235	282	1,52,11,057	633	1,18,88,093	519	33,22,964	
27th ditto	Bombay, Baroda and Central India (j)	461	1,34,890	293	461	1,43,000	210	43,74,889	593	45,34,639	620	1,59,750	
	TOTAL	3,452	9,01,093	261	3,395	8,24,378	243	2,39,73,510	434	2,12,03,656	394	27,69,854	
GRAND TOTAL (GUARANTEED AND STATE)		12,959	27,13,803	209	13,795	29,14,710	211	6,11,73,337	295	6,23,19,994	287	11,46,657	
GROSS ESTIMATED EXPENSES		...	...	...	...	...	...	3,06,88,956	148	3,11,55,742	143	4,66,786
NET RECEIPTS		...	...	...	...	...	...	3,04,84,381	147	3,11,64,252	144	6,79,871
	<i>Assisted Companies.</i>												
3rd August, 1889	Tarakeshwar	22	6,397	291	22	4,802	218	99,649	280	98,433	276	1,216	
13th July, 1889	Dibru-Sadiya	...	...	...	...	(k)	...	(l) 1,26,977	109	(m) 1,44,822	124	17,845
3rd August, 1889	Bengal and North- Western	376	33,130	88	376	42,520	113	8,78,803	146	9,21,351	155	42,548	
20th July, 1889	Rohilkhand-Kumaun	67	6,646	99	67	7,623	114	1,20,936	120	1,31,462	131	10,526	
	TOTAL	465	46,173	99	465	54,945	118	12,26,365	141	12,96,068	151	69,793	
	<i>Native States.</i>												
27th July, 1889	His Highness the Ni- zam's Guaranteed Company	277	25,616	92	354	38,536	109	4,75,348	107	6,58,041	117	1,82,693	
27th ditto	His Highness the Gaekwar's	59	1,602	27	59	2,210	38	49,000	52	45,969	49	3,031	
27th ditto	His Highness the Gaek- war's Veramgam- Mehsana-Vadnagar	21	663	32	27	1,100	40	16,342	49	19,915	47	3,573	
27th ditto	Bhavnagar-Gondal- Junagarh-Porbandar	193	11,376	59	260	13,170	51	3,56,182	115	4,89,260	119	1,33,078	
27th ditto	Morvi	68	2,368	35	68	2,227	33	67,780	62	74,665	69	6,885	
27th ditto	Jodhpore	124	5,651	46	124	5,800	47	1,27,701	64	1,10,092	59	11,609	
	TOTAL	742	47,276	64	892	63,043	71	10,92,353	92	14,03,942	99	3,11,589	

- (a) Included with the Indian Midland Railway.
(b) Includes the Katni-Umaria Branch.
(c) Includes Sanctoria Coal Section of the Bengal-Nagpur Railway.
(d) Includes the Bellary-Kistna State Railway.
(e) Includes the Sindia and Bhopal-Itarsi State Railways.
(f) Includes the Amritsar-Pathankot and Rajpura-Bhatinda State Railways.
(g) Traffic stopped on account of breach of line.

- (h) Includes the Dhond-Manmad, Khámgaon, Amráoti, and Bhopal-Itarsi State Railways.
(i) Includes the Dhond-Manmad, Khámgaon, and Amráoti State Railways.
(j) Includes the Patri Branch.
(k) Return not received.
(l) Total receipts from 1st April to 14th July, 1888.
(m) Total receipts from 1st April to 13th July, 1889.

M. C. BRACKENBURY, Major, R.E.,
Under Secretary.
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SUPPLEMENT TO
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OFFICIAL PAPERS.

A SUPPLEMENT to the GAZETTE OF INDIA will be published from time to time, containing such Official Papers and information as the Government of India may deem to be of interest to the Public, and such as may usefully be made known. The Debates of the Legislative Council of His Excellency the Governor General will in future be published in PART VI of the GAZETTE.

Non-Subscribers to the GAZETTE may receive the SUPPLEMENT separately on a payment of five Rupees per annum if delivered in Calcutta, or eight Rupees if sent by Post. The SUPPLEMENT and PART VI of the GAZETTE can also be subscribed for separately on a payment of Rupees six per annum if delivered in Calcutta or Rupees nine if sent by Post.

No Official Orders or Notifications, the Publication of which in the GAZETTE OF INDIA is required by Law, or which it has been customary to publish in the CALCUTTA GAZETTE, will be included in the SUPPLEMENT. For such Orders and Notifications the body of the GAZETTE must be looked to.

GOVERNMENT OF INDIA.
DEPARTMENT OF FINANCE AND COMMERCE.

REPORT UPON THE OPERATIONS OF THE CURRENCY DEPARTMENT FOR
THE YEAR 1888-89.

No. 131, dated Calcutta, the 9th August 1889.

From—The Head Commissioner of Paper Currency, Calcutta,

To—The Secretary to the Government of India, Department of Finance and Commerce.

I have the honour to submit the report upon the operations of the Currency Department for the year 1888-89.

Arrangements of Subjects.

PARAS.

2. OFFICERS IN CHARGE.
3. ACCOUNTS AND AUDIT.
4. CIRCULATION.
13. ANALYSIS OF CIRCULATION.

14. THE RESERVE—
16. The Investment.
18. Profits of Circulation.

TRANSACTIONS WITH THE PUBLIC—

19. Issue and Receipt of Notes.
22. Encashment of Foreign Notes.
26. Issue and Receipt of Coin.
27. State of the Coinage.
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32. Receipts and Coinage of Bullion.
35. Transactions at Agencies.
37. CLAIMS ON LOST NOTES.
38. FRAUD AND FORGERY.

PARAS.

44. REMITTANCES OF SILVER.
45. TREASURY STATISTICS.
50. RECEIPTS AND EXPENDITURE.

Prescribed Statements.

- No. I.—Statistics of Circulation during 1888-89.
- " II.—Statement of Notes issued, received and cancelled during 1888-89.
- " III.—Statement of Receipts and Expenditure.
- " IV.—Classification of Treasuries according to encashment of Notes.
- " V.—Statistics of Treasury and other Balances on December 31st, 1888.

Other Statements.

- No. VI.—Issues and Receipts of Home Notes.
- " VII.—Issues and Receipts of Coin.
- " VIII.—Value of Notes in circulation from 1862.
- " IX.—Details of ditto ditto 1877.

OFFICERS IN CHARGE.

2. Mr. E. Gay was Head Commissioner up to 10th October and again from 29th October to 31st March 1889. Mr. C. R. Kiernander was in charge

from 11th to 21st October 1888, and Mr. E. T. Atkinson acted from 22nd to 29th October 1888. The other circle offices were in charge of the officers mentioned below :—

Madras . . .	{	Mr. H. F. Clogstoun, from 1st to 10th April 1888.
		„ W. Donald, from 11th to 13th April 1888.
		„ E. W. Kellner „ 14th April to 3rd December 1888.
		„ T. W. Rawlins „ 4th December 1888 to 31st March 1889.
Bombay . . .	{	Mr. A. C. Tupp, from 1st April to 14th May 1888.
		„ S. Jacob „ 15th May to 31st March 1889.
Rangoon . . .	{	Mr. T. H. Biggs, from 1st April 1888 to 18th January 1889, and again from 31st January to 31st March 1889.
		„ F. J. Atkinson, from 19th to 30th January 1889.

ACCOUNTS AND AUDIT.

3. The monthly audit of the accounts has been duly reported for each office to the Comptroller General, and special audits have also been made of Rangoon and Allahabad for the year 1888 by the Deputy Auditors General, and Madras for 1886-87 and 1887-88; also Calicut for October 1887 to September 1888 by an Assistant Accountant General.

CIRCULATION.

4. The following figures show the state of the net circulation :—

	Gross Circulation.	Retired by other Offices.	Net Circulation.
1st April 1888 . . .	16,78,60,015	36,16,220	16,42,43,795
31st March 1889 . . .	15,99,96,270	26,18,135	15,73,78,135

As explained in previous reports, a note is in "Gross Circulation," when it is not yet returned to the original office of issue; but if it has meantime been paid off by another office of issue, and is held by it pending return to the original office of issue, then it has ceased to be in "Net Circulation," though it is still part of the "Gross Circulation."

5. The details of the net circulation of March 1889 are as follows :—

	NUMBER OF NOTES FOR RUPEES.								TOTAL.	
	5	10	20	50	100	500	1,000	10,000	Pieces.	Value.
Calcutta . . .	99,403	1,844,837	68,853	51,831	133,661	15,800	17,547	498	2,232,430	6,67,07,095
Allahabad . . .	11,808	29,277	16,632	11,696	14,667	2,040	2,731	10	88,861	65,86,950
Lahore . . .	12,566	41,902	25,174	17,102	20,236	3,541	2,270	61	122,852	85,14,530
Bombay . . .	242,575	694,483	99,235	65,126	79,243	5,950	14,859	1,117	1,202,588	5,03,27,005
Kurrachee . . .	3,416	35,849	12,943	5,308	7,118	661	1,036	114	66,445	41,18,130
Madras . . .	39,315	111,131	31,310	25,528	98,566	4,132	1,416	61	311,457	1,71,58,985
Calicut . . .	9,009	9,037	3,740	2,714	4,396	122	53	24	29,095	11,39,515
Rangoon . . .	11,571	16,147	6,755	4,308	6,431	716	615	64	46,607	28,25,925
TOTAL FOR 31st March 1889	429,663	2,782,663	264,642	183,611	364,318	32,962	40,527	1,949	4,100,335	15,73,78,135
TOTAL FOR 31st March 1888	450,727	2,671,031	275,045	194,803	372,933	35,915	41,818	2,297	4,044,569	16,42,43,795
TOTAL FOR 31st March 1887	464,635	2,385,881	262,169	175,084	327,418	31,386	36,054	1,410	3,684,037	13,87,68,365

6. It will be observed that there is a decrease in the net circulation during the year of more than 68 lakhs, as explained hereafter in paragraph 11, but it was still higher than in March 1887.

7. The average value of each note in circulation on the last day of the year, compared with the past two years, was—

	1886-87.	1887-88.	1888-89.		1886-87.	1887-88.	1888-89.
Calcutta Circle . . .	29	30	30	Kurrachee Circle . . .	87	88	62
Allahabad „ . . .	68	93	74	Madras „ . . .	68	61	55
Lahore „ . . .	65	62	69	Calicut „ . . .	35	27	39
Bombay „ . . .	36	44	42	Rangoon „ . . .	74	86	61

8. The chief variations are in the Allahabad, Kurrachee and Calicut Sub-Circles, and arise mainly from the Banks holding more or less ten thousand-rupee notes, probably for reserve or remittance.

9. The variations in the net circulation of each circle are shown in the following table, omitting 000—

LAST DAY OF		Calcutta.	Allaha- bad.	Lahore.	Bombay.	Kurra- chee.	Madras.	Calicut.	Rangoon.	TOTAL.
		R	R	R	R	R	R	R	R	R
March	1888	6,44,77	90,46	82,20	5,33,37	48,54	1,97,99	7,85	37,26	16,42,44
April	"	6,40,53	68,33	87,99	5,50,87	49,89	2,18,21	9,93	28,28	16,54,03
May	"	6,09,59	89,96	92,37	5,37,87	49,64	1,93,42	9,66	30,03	17,02,54
June	"	7,21,89	99,14	82,33	5,98,32	42,98	1,76,85	11,25	36,15	17,68,91
July	"	6,62,07	1,11,24	87,95	6,86,83	39,07	1,70,68	15,45	32,24	18,05,53
August	"	6,09,19	88,98	95,80	7,05,98	36,65	1,72,62	15,75	44,20	17,69,17
September	"	6,14,68	83,47	82,96	6,57,76	39,23	1,68,39	12,21	35,39	16,94,09
October	"	6,81,68	82,18	91,05	5,60,33	38,67	1,67,89	10,17	41,66	16,73,63
November	"	6,59,54	79,45	80,38	4,43,92	34,66	1,91,01	9,77	51,71	15,50,44
December	"	6,54,69	95,49	81,24	4,01,70	33,87	1,94,02	10,12	44,10	15,15,23
January	1889	6,57,89	74,96	79,11	4,40,92	36,63	1,87,61	9,26	41,24	15,27,62
February	"	6,60,47	69,69	78,39	4,15,95	39,41	1,81,67	9,85	27,55	14,82,98
March	"	6,67,07	65,87	85,15	5,03,27	41,18	1,71,59	11,39	28,26	15,73,78
Average of last 12 figures		6,60,78	84,06	85,39	5,41,98	40,16	1,82,83	11,23	36,73	16,43,16
" of 1887-88		6,21,18	88,36	91,59	5,17,61	47,59	1,80,21	11,46	58,23	16,16,23
" of 1886-87		5,72,89	77,81	83,10	4,29,10	49,99	1,60,49	13,28	33,93	14,20,11

10. The figures in the above table include the amounts in the Reserve Treasuries of Government which, so far as they are in notes, are always held in the higher denominations. These balances are excluded from the following table, which gives the monthly circulation in lakhs of the Calcutta, Bombay, Madras and other Circles for each of the past three years:—

LAST DAY OF	CALCUTTA.			BOMBAY.			MADRAS.			OTHER CIRCLES.			TOTAL.		
	1886-87.	1887-88.	1888-89.	1886-87.	1887-88.	1888-89.	1886-87.	1887-88.	1888-89.	1886-87.	1887-88.	1888-89.	1886-87.	1887-88.	1888-89.
April	556	584	636	384	406	474	141	148	191	242	223	244	1,323	1,361	1,545
May	540	558	683	369	408	496	138	151	185	242	234	272	1,289	1,351	1,636
June	507	555	694	360	396	549	128	158	171	266	257	272	1,261	1,366	1,686
July	508	567	616	349	463	445	131	166	169	260	318	286	1,248	1,514	1,516
August	560	567	606	369	445	495	139	161	170	255	318	281	1,323	1,491	1,552
September	540	599	604	368	491	469	140	165	162	263	336	253	1,311	1,591	1,488
October	558	609	665	415	606	439	138	164	166	278	360	264	1,389	1,739	1,534
November	562	641	659	447	593	415	139	173	174	231	375	256	1,429	1,782	1,504
December	597	654	640	364	527	386	154	185	181	237	333	265	1,402	1,699	1,472
January	587	648	635	355	496	414	152	187	186	256	291	241	1,350	1,622	1,476
February	584	665	627	361	437	399	156	178	181	240	253	225	1,341	1,533	1,442
March	589	644	646	370	502	431	154	192	169	227	266	232	1,340	1,604	1,478
AVERAGE	557	607	643	376	481	451	142	169	175	258	297	257	1,333	1,554	1,527

11. This table shows a small decrease in the circulation of all circles taken together, a fluctuation not remarkable when it is considered that a very much larger expansion occurred in the previous year, and that in March 1889 there was a great scarcity of money, the Bank rate of interest being 11 per cent. as against 7 per cent. the previous year, and this drain of the commercial centres to supply the trade demand up country where silver is more used than notes, naturally diminished the circulation of notes. The figures for the past four years have been 1,395, 1,333, 1,554, 1,527. In particular circles there is an increase of 36 in Calcutta and a decrease of 30 in Bombay. Among the smaller circles the only noticeable difference is a decrease of 21 at Rangoon, probably caused by the facilities given by Government bills at low rates for the removal of surplus funds to India in the intervals of trade in Burma. The continued decrease in the circulation of R5 notes in the Calcutta Circle calls for notice. As in the case of R20 notes a few years ago, the cause seems to be the alarm

excited by some forgeries which were sufficiently well executed to deceive careless or illiterate persons, or to pass in the hurry of business if carelessly examined.

12. The following figures show (in lakhs and thousands) the gross circulation in the Presidency Circles of notes not exceeding R100 each :—

LAST DAY OF	1887-88.			1888-89.		
	Calcutta.	Bombay.	Madras.	Calcutta.	Bombay.	Madras.
	R	R	R	R	R	R
April	3,18,21	2,02,69	1,12,89	3,38,85	2,25,20	1,36,17
May	3,09,43	2,08,56	1,12,46	3,28,10	2,26,22	1,28,47
June	3,03,64	2,05,41	1,10,05	3,18,09	2,16,88	1,23,63
July	3,05,65	2,05,40	1,08,52	3,18,40	2,20,66	1,21,85
August	3,08,04	2,08,84	1,10,40	3,23,78	2,17,44	1,19,60
September	3,30,96	2,12,26	1,10,98	3,37,66	2,20,22	1,19,13
October	3,21,92	2,19,27	1,17,91	3,51,14	2,22,70	1,23,67
November	3,32,56	2,19,82	1,24,81	3,58,54	2,17,83	1,28,90
December	3,43,43	2,23,37	1,38,39	3,56,69	2,21,44	1,38,92
January	3,53,46	2,20,08	1,41,61	3,63,26	2,08,14	1,36,91
February	3,52,45	2,18,99	1,38,97	3,65,15	2,08,78	1,36,76
March	3,52,57	2,27,38	1,38,75	3,64,93	2,14,35	1,32,48

These figures show that the notes of lower denominations maintain on the whole great steadiness in their circulation.

ANALYSIS OF CIRCULATION.

13. The process of verifying the outstanding balance of the circulation with that obtained from the Issue Registers has been carried on satisfactorily. In Madras and in all the smaller and newer circles, the work is practically completed; in Bombay Mr. Groves, Assistant Accountant General, has, with great industry and care, completed the examination of all but the R10 notes; in Calcutta the system of arranging the cancelled notes pursued for many years makes the examination now attempted peculiarly laborious, and this added to the enormous number of entries involved (nearly 47 millions) makes the correction of every clerical error a hopeless task; accordingly, while the accuracy of every posting during the later years has been rigidly tested, it has not been thought worth while to go over the work of the earlier years, as the question is not one of money or account, but merely of accuracy in recording the history of individual notes.

RESERVE.

14. The value held against the net circulation upon 31st March 1889 was as follows :—

SILVER COIN—

	R	a.	p.	R	a	p.
At Calcutta	1,46,98,211	7	8			
„ Allahabad	80,06,660	0	0			
„ Lahore	84,52,055	0	0			
„ Bombay	2,77,17,380	1	3			
„ Kurrachee	29,11,150	0	0			
„ Madras	1,61,25,785	0	0			
„ Calicut	6,01,405	0	0			
„ Rangoon	45,69,625	0	0			
				8,30,82,271	8	11

SMALL SILVER COIN—	R	a.	p.	R	a.	p.
At Bombay	2,50,000	0	0			
„ Kurrachee	44,800	0	0			
„ Madras	6,30,000	0	0	9,24,800	0	0
SILVER BULLION—						
At Calcutta	33,59,804	6	9			
„ Bombay	1,01,91,230	0	0	1,35,51,034	6	9
Invested in Government Securities				5,98,20,029	0	4
TOTAL AGREEING WITH THE NET CIRCULATION				15,73,78,135	0	0

15. The half-yearly verifications of the currency balances were held for all Circles and Sub-Circles on the 30th September 1888 and on 31st March 1889, and the balances of the last working day of each half-year were verified in accordance with the orders issued on the subject.

Investments.

16. During the year Government ordered that any stock notes which the holders might tender for payment in cash, should be converted into 4 per cent. loan and be taken over by this Department; to meet this purchase securities to the extent of R5,00,000 were sold, but the stock notes paid off were R3,30,000 only, the difference of R1,70,000 will therefore be re-invested by purchase in the open market in 1889, and the opportunity taken to bring up the amount invested, as closely as possible, to six crores, the limit fixed by law. The balance is now held as follows:—

	R
In the 4 per cent. loan of 1842-43	5,88,07,300
„ „ „ „ 1865	30,44,400
„ 4½ „ „ 1879	5,00,000
	6,23,51,700

Taking the whole investment, the average rate is equal to 95·90 for 4 per cents., and par for 4½ per cents.

17. Its book-value, *i.e.*, the actual price at which it was purchased, has been reduced, until the re-investment just mentioned is made, from R5,99,92,500, at which it was taken last year, to R5,98,20,029-0-4, thus—

	4%	4½%	
	R	a. p.	R
Nominal Value, 31st March 1889	6,18,51,700	0 0	5,00,000
Book Value „ „ „	5,93,20,029	0 4	5,00,000

Profits of Circulation.

18. The interest realised on the above-stated nominal value for the year was—

	R	a.	p.
On 4% paper	24,35,849	6	0
„ 4½% „	22,500	0	0
TOTAL	24,58,349	6	0

Issue and Receipt of Notes.

19. The following are the gross statistics of the year, the details by circles being shown in Statement VI :—

Gross circulation, 1st April 1888	R	R
		16,78,60,015
ISSUES—		
a. Over the counter	77,09,71,680	
b. At Agencies	86,08,400	
c. In remittance transactions	12,43,22,205	
		90,39,02,285
		1,07,17,62,300
RECEIPTS—		
d. Over the counter	66,43,07,460	
e. At Agencies	21,55,600	
f. From currency circles	6,44,58,610	
g. In remittance transactions	18,08,44,860	
		91,17,66,030
Balance, being gross circulation, March 31st, 1889		
(vide para. 4)		15,99,96,270

EXPLANATIONS.

a and *d*.—These are the ordinary issues and receipts in exchange for other notes or for coin.

b and *c*.—These are exchange transactions with Treasuries, as the Agencies do not deal directly with the public, but only enable the Treasuries to do so to a greater extent than would otherwise be the case.

f.—This figure represents notes cashed at other currency circles from March 16th, 1888, to March 15th, 1889, and returned during the year under report to the circles to which they belong.

e and g.—These remittances are for the most part payments and receipts of one currency office, in consideration of receipts or payments at another.

COMPARISON.						Issues.	Receipts.
						<i>R</i>	<i>R</i>
1888-89	.	.	.	.	.	90,39,02,285	91,17,66,030
1887-88	.	.	.	.	.	83,20,40,665	80,55,80,115
1886-87	.	.	.	.	.	74,12,56,165	74,47,98,640
1885-86	.	.	.	.	.	76,10,25,730	76,55,44,465

20. The aggregate gross issues and receipts of the several denominations of notes at both offices of Issue and Agencies during the year were as follows:—

	NUMBER OF NOTES FOR RUPEES								TOTAL.	
	5	10	20	50	100	500	1,000	10,000	Number.	Value.
Issues . . .	803,233	4,185,486	533,778	447,260	973,242	144,049	292,124	36,352	7,415,524	R 90,39,02,285
Receipts . . .	824,840	4,075,727	545,043	458,930	982,447	147,453	294,276	36,679	7,365,395	91,17,66,030
More issues . . .	...	109,759	...	...	...	...	...	...	109,759	10,97,590
More receipts . . .	21,607	...	11,265	11,670	9,205	3,404	2,152	327	59,630	89,61,335
						Net Decrease of gross Circulation				78,63,745.

21. The average number of notes that passed over the counters at each Head Office on each working day during the past three years, and the daily average of cancellations, may be shown thus :—

	NOTES CASHED.			NOTES ISSUED.			NOTES CANCELLED.		
	1886-87.	1887-88.	1888-89.	1886-87.	1887-88.	1888-89.	1886-87.	1887-88.	1888-89.
At Calcutta . . .	11,993	12,247	12,434	12,434	13,208	13,319	9,435	9,517	9,272
„ Bombay . . .	6,261	6,498	7,355	6,829	7,405	7,712	3,595	3,654	4,003
„ Madras . . .	2,307	2,352	2,469	2,378	2,530	2,431	2,030	2,126	2,208
„ Rangoon . . .	263	346	359	366	402	433	142	227	223

Encashment of Foreign Notes.

22. The following is the foreign note account of the circles in aggregate :—

	R	R
Balance held on April 1st . . . . .	...	36,16,220
Received over the counter	6,08,00,525	
From other circles	51,85,380	
		6,59,85,905
TOTAL		6,96,02,125
Remitted to circles concerned . . . . .	...	6,69,83,990
Balance on March 31st . . . . .	...	26,18,135
TOTAL		6,96,02,125

23. The following statement shows the statistics of the encashment of foreign circle notes, giving for the year an aggregate total as just mentioned of Rs 6,08,00,525.

Statement of Foreign Circle Notes cashed during the year 1888-89.

Cashed by	Calcutta.	Allahabad.	Lahore.	Bombay.	Akola.	Nagpur.	Kurrachee.	Madras.	Calicut.	Coconada.	Rangoon.	TOTAL.
Calcutta . . .	...	91,40,115(c)	50,85,045(c)	1,37,34,570	50	235	1,56,505	15,22,490	19,070	10	6,64,985	3,03,23,075
Allahabad . .	40,90,070	...	5,30,295	5,14,685	50	90	26,595	3,36,160	2,900	50	5,690	55,06,585
Lahore . . .	21,46,360	5,06,385	...	7,02,980	100	5	3,13,570	4,86,755	2,930	...	18,680	41,77,715
Bombay . . .	38,01,370	13,36,870	26,22,535	...	...	...	14,76,845(c)	36,09,225	3,63,615	130	1,71,295	1,33,81,885
Kurrachee . .	2,10,360	37,980	5,93,435	6,36,185	...	100	...	76,190	595	...	1,850	15,56,695
Madras . . .	2,58,105	24,910	35,940	24,32,305	...	20	34,675	...	13,23,795(c)	...	49,170	41,58,920
Calicut . . .	5,465	9,315	360	6,34,895	...	...	...	10,32,535	...	...	4,150	16,86,720
Rangoon . . .	6,775	20	1,760	20	...	...	20	320	15	...	...	8,930
TOTAL . . .	1,05,18,505	1,10,55,595	88,69,370	1,36,55,590	200	450	20,08,210	70,63,675	17,12,920	190	9,15,820	6,08,00,525

The letter (c) marks the cases in which the foreign notes are legally encashable, i.e., shows the amounts of Sub-Circle notes encashed by their respective Head Circles, aggregating Rs 1,70,25,800.

24. The comparison for three years is as follows :—

	1886-87.	1887-88.	1888-89.
	R	R	R
Notes cashed at—			
Calcutta	4,08,03,545	3,16,13,695	3,03,23,075
Allahabad	35,55,385	51,97,540	55,06,585
Lahore	31,13,485	31,53,610	41,77,715
Bombay	1,76,45,080	1,27,52,985	1,33,81,885
Kurrachee	26,515	4,92,275	15,56,695
Madras	52,46,620	51,24,625	41,58,920
Calicut	21,55,805	15,69,735	16,86,720
Rangoon	16,080	3,855	8,930
	7,25,62,465	5,99,08,320	6,08,00,525

25. Of this, the amount of notes issued by each Sub-Circle and cashed under the requirements of the law at its Head Circle Office was in—

	1886-87.	1887-88.	1888-89.
	<i>R</i>	<i>R</i>	<i>R</i>
Calcutta	1,90,79,500	1,77,61,635	1,42,25,160
Bombay	50,54,895	26,93,140	14,76,845
Madras	28,56,850	16,75,255	13,23,795
	<u>2,69,91,245</u>	<u>2,21,30,030</u>	<u>1,70,25,800</u>

Issue and Receipt of Coin.

26. The transactions in coin are as follows (for details by circles refer to Statement VII) :—

	Coin.		Small Coin.	
	<i>R</i>	<i>a. p.</i>	<i>R</i>	<i>a. p.</i>
Balance, April 1st, 1888	9,44,84,226	15 5	5,95,400	0 0
RECEIPTS—				
Over the counter	18,41,46,105	0 0		
From small coin account	24,91,174	0 0		
At Agencies	88,28,400	0 0		
In remittance transactions	11,66,25,856	12 0		
From treasury on account of Mint certificates	22,55,973	11 9		
From coin account . . . . .	.....		28,20,574	0 0
TOTAL RECEIPTS	31,43,47,509	7 9	28,20,574	0 0
TOTAL BALANCE AND RE- CEIPTS	40,88,31,736	7 2	34,15,974	0 0
ISSUES—				
Over the counter	20,47,79,820	0 0		
At Agencies	23,75,600	0 0		
In remittance transactions	11,56,76,201	12 0		
For Bullion delivered and pre- melting fees	97,269	2 3		
To small coin account	28,20,574	0 0		
To coin account . . . . .	.....		24,91,174	0 0
TOTAL ISSUES	32,57,49,464	14 3	24,91,174	0 0
BALANCE, MARCH 31st (see paragraph 14)	8,30,82,271	8 11	9,24,800	0 0
	Receipts.		Issues.	
	<i>R</i>		<i>R</i>	
Comparison, 1888-89	31,43,47,509		32,57,49,464	
1887-88	29,07,75,377		26,80,13,604	
1886-87	24,77,61,747		24,84,90,924	

State of the Coinage.

27. The following table (in thousands of rupees) shows the operations during the year in the withdrawal of shroff-marked and defaced coins from circulation and their remittance to the Mints for re-coinage :—

	Balance, April 1st.	Receipts from the public.	Remitted to Mints.	Balance.
	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>
India Treasuries	14,54	2,26	15,98	82
Central Provinces	12	14	13	13
Burma	3	3	2	4
Assam	1	1	0	2
Bengal	12	12	12	12
North-Western Provinces	4,20	7,91	6,29	5,82
Punjab	3,96	35,05	26,48	12,53
Madras	51	93	66	78
Bombay	18	73	83	8
Hyderabad	1	0	0	1
TOTAL	23,68	47,18	50,51	20,35

28. The following shows the operation of the cutting clauses of the Coinage Act during 1888 :—

Statement showing the number of coins cut and broken under the Coinage Act in Treasuries throughout India during the Calendar year 1888.

NAME OF PROVINCE.	Number of Treasuries in which coins were cut.	Believed to have lost by reasonable wear more than 2 per cent. in weight.				Believed to be counterfeit.				Believed to have been reduced in weight otherwise than by reasonable wear.				Considered unfit for further circulation by reason of obliteration of device or for other cause.			
		<i>R</i>	$\frac{1}{2}$ <i>R</i>	$\frac{1}{4}$ <i>R</i>	$\frac{1}{8}$ <i>R</i>	<i>R</i>	$\frac{1}{2}$ <i>R</i>	$\frac{1}{4}$ <i>R</i>	$\frac{1}{8}$ <i>R</i>	<i>R</i>	$\frac{1}{2}$ <i>R</i>	$\frac{1}{4}$ <i>R</i>	$\frac{1}{8}$ <i>R</i>	<i>R</i>	$\frac{1}{2}$ <i>R</i>	$\frac{1}{4}$ <i>R</i>	$\frac{1}{8}$ <i>R</i>
Government of India	7	4,622	3,672	...	...	987	11	9	5	8,599	4,929	1,737	853	...	...	...	...
Central Provinces	12	4,287	22	...	...	40	8	16	32	82	54	40	96	...	...	...	...
Burma	...	34	1	1	...	2,424	48	64	40	16	...	...	...	...	...	...	...
Assam	8	15	1	...	...	188	...	5	3	11	1	...	...	...	...	...	...
Bengal	41	1,874	223	785	1,100	1,098	94	6	...	1,385	137	32	224	...	...	...	...
N.-W. P. and Oudh	46	12,152	636	37	446	859	15	39	72	10,066	56	70	26	...	...	...	...
Punjab	21	6,059	...	...	...	396	15	...	...	5,566	41	...	...	...	...	...	...
Madras	25	20,313	22,071	...	...	610	50	66	11	191	12	...	...	...	...	...	...
Bombay	24	81,534	1	...	...	380	16	14	8	1,933	35	...	...	...	...	...	...
Hyderabad	...	235	...	...	...	...	...	...	...	133	1	1	1	...	...	...	...
TOTAL	...	1,31,125	26,627	823	1,546	6,982	257	219	171	27,982	5,266	1,880	1,200	...	...	...	...

29. The usual statements are attached of whole rupees coined and issued from the Indian Mints during the years 1835 to 1888, and the proportions of each of those annual issues found on examination in every District Treasury of a bag of rupees of the coin ordinarily current in the districts. The difficulty in drawing any detailed conclusions from these statements has been pointed out in previous reports, but they show the very gradual disappearance of old coin from circulation and the equally gradual spread of new coin to take its place.

30. The circumstances of the India Treasuries are exceptional as explained in former reports; but leaving these Treasuries out of consideration, the

figures continue to show that, as might be expected, the percentage of the coin of the later years held in Madras, the Punjab, and in the North-Western Provinces and Oudh is largely below the percentage of the same coin held in Bengal and Bombay, which are nearer to the Mints; while the percentage held in Bengal is largely below that in Bombay, into which Presidency the great bulk of the silver is imported. No new rupees were sent by Government to Burma last year.

Statement of Whole Rupees coined and issued from the Indian Mints, from 1835 to 1888.

	Coined in Calcutta.	Coined in Madras.	Coined in Bombay.	Total coined.
	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>
William IV	10,90,88,070	11,78,000	5,37,12,502	16,39,78,572
Victoria, 1840—1st issue . .	17,99,34,670	2,18,98,181	10,98,38,073	31,16,70,924
" 1840—2nd issue . .	39,85,53,660	5,50,49,201	31,29,58,076	76,65,60,937
" 1862	26,94,27,222	2,94,81,923	40,80,03,034	70,69,12,179
" 1874	1,50,13,834	...	2,85,08,566	4,35,22,400
" 1875	1,16,31,951	...	1,93,59,597	3,09,91,548
" 1876	1,20,01,264	...	2,89,49,037	4,09,50,301
" 1877	3,92,51,692	...	9,55,54,320	13,48,06,012
" 1878	3,26,57,837	...	6,39,27,196	9,65,85,033
" 1879	1,59,28,325	...	7,27,99,904	8,87,28,229
" 1880	1,83,99,894	...	5,37,85,624	7,21,85,518
" 1881	24,35,719	...	31,61,858	55,97,577
" 1882	1,50,90,289	...	5,63,97,278	7,14,87,567
" 1883	51,23,372	...	1,80,22,789	2,31,46,161
" 1884	1,16,41,757	...	3,68,46,570	4,84,88,327
" 1885	3,41,52,203	...	6,48,78,000	9,90,30,203
" 1886	1,08,78,075	...	4,11,46,457	5,20,24,532
" 1887	4,02,00,148	...	4,84,00,000	8,86,00,148
" 1888	75,68,000	...	6,32,00,000	7,07,68,000
TOTAL	1,22,89,77,982	10,76,07,305	1,57,94,48,881	2,91,60,34,168

Proportion of the several Issues of Government Rupees in actual circulation in British India in the years 1875 to 1889, as ascertained by the examination, each year, of a bag containing 2,000 in every Government Treasury.

In what year exam- ined.	William IV.	VICTORIA.																		Portuguese.	TOTAL.	
		1840. 1st Issue.	1840. 2nd Issue.	1862.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.			1889.
1875 .	117	227	635	962	38	21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,000
1876 .	103	251	629	944	36	41	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,000
1877 .	103	219	594	892	40	65	59	28	...	...	...	...	...	...	...	...	...	...	...	...	...	2,000
1878 .	106	180	509	760	35	54	59	227	70	...	...	...	...	...	...	...	...	...	...	...	...	2,000
1879 .	78	172	489	733	32	51	61	220	140	15	...	...	...	...	...	...	...	...	...	...	...	2,000
1880 .	64	151	449	720	31	52	57	203	137	91	40	...	...	...	...	...	...	...	...	...	...	2,000
1881 .	65	149	430	685	29	44	53	199	131	103	111	1	...	...	...	...	...	...	...	...	...	2,000
1882 .	62	143	414	678	28	44	52	189	129	112	115	15	19	...	...	...	...	...	...	...	...	2,000
1883 .	61	156	388	662	26	40	48	182	122	102	106	18	83	5	...	...	...	...	...	...	...	2,000
1884 .	55	141	375	610	23	36	47	164	113	114	107	17	44	26	27	...	...	...	...	...	...	2,000
1885 .	53	136	372	588	23	34	44	155	107	102	95	12	133	39	78	29	...	...	...	...	...	2,000
1886 .	44	114	317	557	20	33	40	135	90	83	90	10	120	33	80	188	46	...	...	...	...	2,000
1887 .	43	107	308	534	18	29	39	124	85	75	79	8	108	31	81	171	120	39	...	...	...	1 2,000
1888 .	39	103	302	510	18	29	36	118	79	70	78	10	98	28	79	157	98	102	45	...	...	1 2,000
1889 .	36	101	269	473	17	27	34	111	74	67	70	7	87	26	68	132	90	129	139	42	1	2,000

Proportion of the several Issues of Government Rupees in actual circulation in each Province in the years 1875, 1880, 1885, 1886, 1887, 1888, and 1889, as ascertained by the examination each year of a bag containing R2,000 in every Government Treasury.

In what year exam- ined.	VICTORIA.																				Total.	
	Before 1835.	William IV.	1840. 1st Issue.	1840. 2nd Issue.	1862.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.		1889.	Ulwar. Surat, Arcot, and Portu- guese.
INDIA.																						
1875	105	196	604	1,004	74	17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,000
1880	70	161	489	831	23	51	58	125	88	90	14	...	...	...	...	...	...	...	...	...	...	2,000
1885	60	198	342	513	19	25	34	122	88	92	106	13	147	47	170	24	...	...	...	...	...	2,000
1886	36	96	264	465	18	28	33	113	60	71	84	13	132	23	141	403	19	...	...	...	...	2,000
1887	40	96	251	410	13	20	36	89	61	62	75	10	153	27	141	364	136	76	...	...	...	2,000
1888	43	109	271	416	11	26	31	83	72	60	82	5	135	26	142	325	106	52	13	...	...	2,000
1889	24	51	230	413	15	28	28	91	54	76	78	8	89	35	100	180	196	151	134	18	...	2,000
CENTRAL PROVINCES.																						
1875	59	145	540	1,172	70	14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,000
1880	23	97	412	862	31	69	100	225	128	34	19	...	...	...	...	...	...	...	...	...	...	2,000
1885	16	62	363	709	26	45	72	142	89	70	114	8	127	30	64	53	...	...	...	...	...	2,000
1886	24	91	332	669	21	41	57	141	84	66	110	8	114	26	61	109	46	...	...	...	...	2,000
1887	15	56	272	605	19	36	54	110	77	62	95	7	98	25	59	138	167	105	...	...	...	2,000
1888	18	70	272	584	17	33	50	101	68	57	89	14	86	21	57	116	148	404	95	...	...	2,000
1889	10	67	193	514	18	32	44	95	59	53	84	7	78	22	59	112	117	126	256	54	...	2,000
BURMA.																						
1875	47	122	501	1,231	72	27	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,000
1880	29	88	317	655	62	103	39	353	211	32	111	...	...	...	...	...	...	...	...	...	...	2,000
1885	29	99	235	453	33	46	32	177	124	74	126	40	370	40	110	12	...	...	...	...	...	2,000
1886	25	68	230	365	20	34	26	133	83	51	75	21	264	38	107	403	57	...	...	...	...	2,000
1887	24	74	226	410	20	30	26	124	74	54	78	16	228	58	134	278	124	22	...	...	...	2,000
1888	18	70	214	388	20	34	26	110	68	36	72	16	186	44	102	222	138	214	22	...	...	2,000
1889	20	76	238	386	24	36	28	116	72	40	68	16	182	42	100	208	104	206	38	...	...	2,000
ASSAM.																						
1875	164	254	646	924	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,000
1880	108	223	431	743	31	32	28	270	112	22	...	...	...	...	...	...	...	...	...	...	...	2,000
1885	80	164	374	570	24	28	30	218	112	62	48	14	134	92	40	10	...	...	...	...	...	2,000
1886	75	137	368	576	25	31	27	202	118	60	49	13	130	79	48	56	6	...	...	...	...	2,000
1887	76	128	386	568	22	26	32	188	116	64	44	12	114	60	84	64	16	...	...	...	...	2,000
1888	64	126	368	580	28	28	192	102	60	48	14	104	48	58	72	18	54	8	...	...	...	2,000
1889	62	134	312	518	20	24	30	174	100	58	44	10	102	33	52	84	36	138	58	6	...	2,000
BENGAL.																						
1875	133	223	655	954	23	12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,000
1880	87	146	435	687	41	54	56	302	192	34	16	...	...	...	...	...	...	...	...	...	...	2,000
1885	68	152	378	559	28	37	41	204	121	70	63	12	...	53	59	36	...	...	...	...	...	2,000
1886	67	133	358	540	25	31	34	181	113	64	55	9	107	46	55	148	34	...	...	...	...	2,000
1887	55	152	338	552	22	30	37	183	110	64	52	8	...	44	55	140	38	4	...	...	...	2,000
1888	58	132	316	510	20	30	32	168	94	58	58	8	...	34	54	128	62	126	16	...	...	2,000
1889	53	128	272	454	21	29	29	144	88	53	49	8	76	31	44	110	73	224	103	11	...	2,000
NORTH-WESTERN PROVINCES AND OUDH.																						
1875	184	332	761	716	6	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,000
1880	101	222	558	628	23	37	4	172	128	78	4	...	...	...	...	...	...	...	...	...	...	2,000
1885	94	204	455	606	20	28	4	155	114	102	57	4	55	21	26	18	...	...	...	...	...	2,000
1886	80	198	421	582	18	29	4	143	105	96	53	6	55	26	36	58	47	...	...	...	...	2,000
1887	82	188	434	576	18	28	4	150	110	92	54	4	52	20	36	74	36	4	...	...	...	2,000
1888	80	166	450	554	18	28	40	146	100	92	56	4	56	22	38	78	52	18	2	...	...	2,000
1889	80	182	397	532	17	27	35	142	104	85	56	4	60	21	41	88	50	35	33	11	...	2,000
PUNJAB.																						
1875	201	410	872	516	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,000
1880	86	219	554	435	12	12	31	189	146	294	21	...	...	...	...	...	...	...	...	...	...	2,000
1885	74	178	472	468	14	18	34	166	142	284	100	2	20	6	14	8	...	...	...	...	...	2,000
1886	73	152	406	404	11	17	28	142	108	206	82	2	44	10	62	251	2	...	...	...	...	2,000
1887	68	162	404	424	14	20	30	138	104	170	80	2	48	10	62	220	44	...	...	...	...	2,000
1888	62	188	378	422	16	16	32	126	104	168	74	6	50	10	64	208	66	8	2	...	...	2,000
1889	62	194	350	428	14	20	32	130	104	164	74	2	50	10	58	202	64	18	22	2	...	2,000
MADRAS.																						
1875	52	161	627	1,140	4	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,000
1880	53	144	537	927	18	46	71	87	66	36	15	...	...	...	...	...	...	...	...	...	...	2,000
1885	37	118	471	810	20	40	53	104	75	51	80	7	64	19	50	1	...	...	...	...	...	2,000
1886	45	131	410	782	19	41	55	105	74	42	88	5	71	24	76	31	1	...	...	...	...	2,000
1887	37	123	411	783	17	39	54	95	72	46	81	5	68	21	68	56	20	1	...	...	...	2,000
1888	29	103	385	712	20	34	44	96	70	45	83	5	68	34	109	68	31	48	14	...	...	2,000
1889	29	97	369	669	18	33	45	89	63	44	73	6	73	33	87	74	29	97	63	7	...	2,000
BOMBAY.																						
1875	37	100	382	1,246	114	121	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,000
1880	21	60	306	763	33	62	81	152	166	194	162	...	...	...	...	...	...	...	...	...	...	2,000
1885	17	50	259	600	23	39	54	107	88	116	161	11	019	45	170	94	...	...	...	...	...	2,000
1886	11	91	199	579	19	36	47	93	75	94	156	8	143	32	122	195	95	...	...	...	...	2,000
1887	13	60	203	515	16	31	43	83	62	81	126	7	117	22	109	211	185	110	...	...	...	2,000
1888	13	39	172	432	16	28	37	69	55	70	113	7	107	22	105	207	154	170	11	...	...	2,000
1889	11	43	187	437	14	25	39	68	53	60	99	10	89	17	83	169	118	139	244	90	...	2,000
HYDERABAD (BERAR).																						
1886	4	42	182	614	21	43	51	98	78	76	147	12	138	28	92	229	145	...	...	...	...	2,000
1887	7	32	151	496	15	32	39	83	59	58	106	7	98	24	66	260	433	133	...	...	...	2,000
1888	8	29	189	500	16	32	39	90	61	55	102	18	93	17	68	250	204	227	101	...	...	2,000
1889	2	6	35	145	10	20	28	58	39	38	73	4	71	13	55	93	169	157	443	219	...	2,000

Exchange of Small Coin.

31. The receipts and issues of small change at the Currency Offices during the year were the following :—

	Receipts.			Issues.			Net Issues.		
	R	a.	p.	R	a.	p.	R	a.	p.
Half Rupees	4,53,397	0	0	10,34,643	0	0	5,81,246	0	0
Quarter Rupees	3,37,074	0	0	16,83,498	0	0	13,46,424	0	0
One-eighth Rupees	2,64,536	0	0	10,98,775	0	0	8,34,239	0	0
Copper	78,665	0	0	4,08,893	0	0	3,30,228	0	0
TOTAL	11,33,672	0	0	42,25,809	0	0	30,92,137	0	0
TOTAL, 1887-88	9,04,855	0	0	40,02,913	0	0	30,98,058	0	0

Bullion.

32. The following figures show the operations of the Bullion clauses of the Currency Act,—that is, the amount of bullion received by the Mint Masters on account of the Currency Offices at Calcutta and Bombay,—for the issue of certificates payable at the Currency Offices in notes of the circle or coin :—

	Calcutta.			Bombay.		
	R	a.	p.	R	a.	p.
Balance of Bullion on April 1st, 1888	4,86,457	14	6	86,87,681	1	9
Receipt of Bullion at 979 per mille—						
April 1888	149	8	0	85,41,115	14	7
May „	10,674	11	0	52,31,301	5	11
June „	1,68,842	0	0	34,57,695	1	3
July „	6,72,707	11	0	52,33,516	0	0
August „	6,01,249	12	0	35,60,977	0	0
September „	1,93,901	8	0	43,69,423	0	0
October „	1,47,377	11	0	33,80,794	0	0
November „	124	6	0	30,44,738	0	0
December „	1,51,208	13	0	13,05,743	0	0
January 1889	4,26,577	11	0	65,77,290	0	0
February „	5,49,135	2	0	71,66,586	0	0
March „	28,03,727	0	0	91,66,671	0	0
TOTAL OF 12 MONTHS	57,25,675	13	0	6,10,35,850	5	9
Additional 1 per mille credited on account of melting fees. (Paid out of Currency Reserve at a later date than when the bullion is tendered for coinage.)	3,127	9	8	61,825	5	10
TOTAL RECEIPTS	57,28,803	6	8	6,10,97,675	11	7
TOTAL RECEIPTS AND BALANCE	62,15,261	5	2	6,97,85,366	13	4
Mint Certificates realized from Treasury	28,55,456	14	5	5,95,94,126	13	4
Balance of Bullion on 31st March 1889 (see paragraph 14).	33,59,804	6	9	1,01,91,230	0	0

33. The receipts for the last five years have been—

	Calcutta.	Bombay.	TOTAL.
	R	R	R
1884-85	1,77,38,617	4,53,44,578	6,30,83,195
1885-86	1,94,06,198	6,75,75,104	8,69,81,302
1886-87	1,15,76,364	3,60,97,380	4,76,73,744
1887-88	94,57,469	6,42,88,585	7,37,46,054
1888-89	57,28,803	6,10,97,675	6,68,26,478

34. The operation of the bullion clauses of the Currency Act is also shown in further detail of the transactions between Mint and Currency in the following figures:—

Thousands of Rupees

	Transfers to the Mint of bullion from the Currency Department,			Balance at end of month of bullion paid for by Currency Department and held as part of its reserve.			Balance of bullion held on Treasury Account, that is, the amount by which the deliveries of new coin failed to meet the Mint certificates payable by Treasury to Currency.		
	Calcutta.	Bombay.	TOTAL.	Calcutta.	Bombay.	TOTAL.	Calcutta.	Bombay.	TOTAL.
	R	R	R	R	R	R	R	R	R
April 1888 . . . . .	...	87,70	87,70	3,14	1,11,86	1,15,00	8,70	—7,37	1,33
May "	11	48,71	48,82	3,01	82,50	85,51	4,15	—6,02	—1,87
June "	1,73	38,23	39,96	4,69	44,06	48,75	5,77	—11,48	—5,71
July "	8,41	51,96	60,37	11,42	33,75	45,17	8,72	—14,60	—5,88
August "	5,60	37,56	43,16	15,52	21,50	37,02	10,70	6,16	16,86
September "	97	44,85	45,82	14,32	50,30	64,62	9,77	—7,13	2,64
October "	1,51	34,66	36,17	6,78	38,72	45,50	15,62	—9,45	6,17
November " . . . . .	...	29,11	29,11	6,17	30,61	36,78	9,72	—3,16	6,56
December "	1,55	12,35	13,90	5,05	13,24	18,29	6,79	4,96	11,75
January 1889	4,36	67,17	71,53	8,95	57,83	66,78	9,81	—11,62	—1,81
February "	5,61	73,21	78,82	10,88	76,81	87,69	20,57	—13,34	7,23
March "	28,73	96,55	1,25,28	33,60	1,01,91	1,35,51	4,79	—17,91	—13,12
TOTAL RECEIPTS FOR 12 MONTHS .	58,58	6,22,06	6,80,64	...	...	...	...	...	...

Agencies.

35. The following are the transactions at the Agencies:—

	Number of Agencies.	Issues of Notes.	Receipts of Notes.
Agencies of the Calcutta Circle	17	17,500	2,95,500*
" Lahore "	5	68,23,000	5,31,000
" Bombay "	2	6,67,000	7,13,100
" Madras "	2	6,73,000	5,96,000
" Rangoon "	1	4,27,900	20,000
	27	86,08,400	21,55,600

* In addition to this Backergunge received Rs20,000 worth notes from the Treasury for an opposite payment from Reserve Treasury to Currency at Calcutta.

36. The Agencies enumerated in the above figures are the following:—

Calcutta Circle.		Lahore Circle.		Madras Circle.	Rangoon Circle.
1. Backergunge.	10. Monghyr.	1. Rawal-Pindi.		1. Cocanada.	1. Mandalay,
2. Cachar.	11. Patna.	2. Amballa.		2. Vizagapatam.	
3. Chumparun.	12. Purneah.	3. Peshawar.			
4. Chittagong.	13. Rungpore.	4. Simla.			
5. Dacca.	14. Rajshahye.	5. Multan.			
6. Gya.	15. Shahabad.			Bombay Circle.	
7. Moorshedabad.	16. Shillong.			1. Nagpore.	
8. Mymensingh.	17. Sylhet.			2. Akola.*	
9. Mozafferpore.					

* The Akola Agency has been closed since the end of 1888.

CLAIMS ON LOST NOTES.

37. The following is the statement of lost and mutilated notes paid during the year on bond of indemnity :—

NATURE OF LOSS.		NUMBER OF NOTES FOR RUPEES.							TOTAL.	
		5	10	20	50	100	500	1,000	10,000	Number. Value.
HALF NOTES	Lost by Post	27	200	73	90	167	7	2	...	566 30,295
	Lost accidentally	17	124	94	53	132	10	8	...	438 32,055
	Mutilated	4	42	4	5	12	...	...	...	67 1,970
		48	366	171	148	311	17	10	...	1,071 64,320
WHOLE NOTES	Lost by Post	...	...	...	...	...	...	...	...	...
	Lost accidentally	...	2	...	...	1	...	...	...	3 120
	Mutilated	9	15	2	1	9	...	...	...	36 1,185
	Mismatched	...	1	...	...	...	...	...	...	1 10
		9	18	2	1	10	...	...	...	40 1,315
1888-89		57	384	173	149	321	17	10	...	1,111 65,635
1887-88		63	327	80	111	238	29	11	...	859 60,035
1886-87		56	275	64	116	277	31	27	...	846 80,310

FRAUD AND FORGERY.

38. It is seldom that a year passes without fraudulent claims to payment of notes, of which the whole or part is alleged to be lost by the claimant. During the past year a case occurred in Calcutta, which is noticeable both from the position of the claimant and from the numerous points decided by the High Court in its judgment on the case. A man forwarded two half-notes for R20 each, with a circumstantial story that he had recently lost the corresponding halves, and he furnished written declarations from two of his friends that they had seen the whole notes in his possession and confirming his claim in detail. On enquiry it appeared that these halves alleged to have been recently lost had really been deposited in the Currency Office for the last seventeen years, their value having been paid to the real owner who had lost the halves now produced.

39. The intention was so evidently fraudulent that I directed the prosecution of the persons concerned. All were defended by Counsel and every point urged in their favour, but two of the accused were convicted. The judgment dealt fully with the legal points raised, and has been very useful in suggesting some additional precautions in dealing with these cases. I have circulated copies of the judgment to all Currency Circles.

40. The following forgeries of notes came to light in the year under review, and they were all of the Calcutta Circle except one of the Bombay Circle :—

Of 5-rupee notes, fifty-five pieces.
 „ 10 „ „ fifty-nine pieces.
 „ 20 „ „ three pieces.

41. The note of the Bombay Circle was for R10 of the series $\frac{U}{84}$. It was received at the railway station and no trace of the utterer was obtainable. The forgeries of notes of the Calcutta Circle consisted entirely of the denominations of R5 and 10, owing, no doubt, to the practice of not keeping any record of the numbers of notes of these denominations making it difficult to trace out the history of such notes, the result being that only one conviction was obtained.

42. The five-rupee notes belong to the same set as those which have been uttered since 1883-84, of the $\frac{R}{73}$ series. Of such notes, fifty-five were pre-

sented: twenty-five at Benares, two at Lahore, and four at Bombay; and the total presented from 1883-84 now amounts to one hundred and fifty-one. The only conviction was of two men in January 1888 as mentioned in the last report.

43. The ten-rupee notes were of the series $\frac{R}{77}$ and $\frac{R}{85}$, and belonged to a new set of forgeries, of which fifty-nine notes were presented, *viz.*, eleven at Calcutta, five at Bombay, three at Kurrachee, and forty at various places in the Punjab. A man named Tania Hajam was sentenced, in November 1888, to six years' imprisonment for the issue of the former, and another man named Mohindro-nath Chatterjee was convicted of issuing the latter, and was sentenced, in July 1888, to six years' imprisonment.

REMITTANCES OF SILVER.

44. The following is the detail of silver remittances :—

	<i>R</i>	
Allahabad to Calcutta	28,29,210	(Rs.29,210 of this was shroff-marked coin.)
Lahore to Calcutta	26,71,100	(Whole of this amount was shroff-marked and uncurrent coin.)
Bombay to Calcutta	2,02,00,000	
Bombay to Allahabad	25,00,000	
Bombay to Madras	1,10,00,000	
Bombay to Kurrachee	31,18,000	
Kurrachee to Bombay	8,000	

TREASURY STATISTICS.

45. The transactions in notes at the several Treasuries in India during 1886-87, 1887-88, and 1888-89 have been as follows :—

	1886-87.	1887-88.	1888-89.
	<i>R</i>	<i>R</i>	<i>R</i>
Receipts from the public in payment of Govern- ment dues	9,03,04,820	9,87,00,135	10,84,77,135
Receipts from the public in exchange for silver	3,05,22,080	3,04,07,155	2,77,18,515
Receipts from the public for other notes	25,05,895	26,43,280	27,75,875
TOTAL RECEIPTS	12,33,32,795	13,17,50,570	13,89,71,525
Issues to the public in payment of Government dues	3,81,90,680	3,94,35,720	4,60,75,250
Issues to the public in exchange for silver	3,08,04,965	3,22,23,720	3,31,94,190
Issues to the public for other notes	25,05,895	26,43,280	27,75,875
TOTAL ISSUES	7,15,01,540	7,43,02,720	8,20,45,315

46. The total Treasury transactions in notes during the last three years have been as follows (in lakhs of Rupees) :—

	1886-87.	1887-88.	1888-89.
	<i>R</i>	<i>R</i>	<i>R</i>
Government of India	319	278	369
Central Provinces	34	40	43
Burma	29	24	21
Assam	59	60	58
Bengal	540	563	539
North-Western Provinces and Oudh	172	181	212
Punjab	247	279	333
Madras	258	291	325
Bombay	279	333	299
Hyderabad	11	11	11
	1,948	2,060	2,210

47. Statement IV classifies the treasuries of the Government of India as follows:—

	1886-87.	1887-88.	1888-89.
Where notes were cashed throughout the year to the extent of the public demand	163	148	150
Where notes were ordinarily cashable, but not always	28	43	40
Where notes were not usually cashable	39	46	46
TOTAL	230	237	236

48. Statement V shows the proportion of treasury and bank balances which in each province was held in the form of Currency Notes, and, as stated before, the holdings of the Reserve Treasuries greatly affect the comparisons in this statement.

49. Including Reserve Treasuries, the percentage of balances held in notes was:—

	1887.	1888.
Calcutta Circle	39	33
Bombay „	40	29
Madras „	18	25

But if Reserve Treasuries were omitted, the figures would be—

	1887. BALANCE IN		1888. BALANCE IN		PERCENTAGE OF NOTES.	
	Notes.	Cash.	Notes.	Cash.	1887.	1888.
Calcutta Circle	36,26	104,11	30,52	82,56	29	25
Bombay „	15,87	62,59	12,91	65,60	16	20
Madras „	15,23	92,06	14,98	73,99	17	14

RECEIPTS AND EXPENDITURE.

50. The receipts and expenditure of the department are shown in detail in Statement No. III. The final disbursements of 1887-88 were less by RS,225-5-9 as compared with the approximate figures given in last year's report as per details given at foot of the above statement. The expenditure in 1888-89 was less than in the former year by R35,469, owing, mainly, to a smaller quantity of note forms having been received from England.

General Remarks.

51. Several changes in the method of procedure in the Currency Offices have been introduced during the course of the year, and under the able superintendence of Mr. Kiernander, whose wide experience of the offices in all parts of India was most useful, a Currency Office Code, with a set of standard forms, has been issued and brought into operation with a view to ensure uniformity of practice in all the offices, and to prevent frauds of the kind mentioned in paragraph 39 of the last report in connection with lost and imperfect notes and other valuables. Mr. Groves has also done good service in examining the Issue Registers at Bombay as mentioned in paragraph 13.

STATEMENTS.

No.

Statement of the value of Government Currency Notes in

DATE.	CALCUTTA.		ALLAHABAD.	
	Value of Notes in circulation.	Monthly increase + or decrease—.	Value of Notes in circulation.	Monthly increase + or decrease—.
	₹	₹	₹	₹
March 1888	6,44,77,440		90,46,385	
April "	6,40,53,430	— 4,24,010	68,32,695	— 22,13,690
May "	6,99,58,995	+ 59,05,565	89,96,010	+ 21,63,315
June "	7,21,89,180*	+ 22,30,185	99,14,300	+ 9,18,290
July "	6,62,07,450	— 59,81,730	1,11,24,360*	+ 12,10,060
August "	6,09,19,105†	— 52,88,345	88,97,730	— 22,26,630
September "	6,14,68,455	+ 5,49,350	83,46,980	— 5,50,750
October "	6,81,67,630	+ 66,99,175	82,17,600	— 1,29,380
November "	6,59,54,375	— 22,13,255	79,44,555	— 2,73,045
December "	6,54,69,040	— 4,85,335	95,49,075	+ 16,04,520
January 1889	6,57,89,210	+ 3,20,170	74,95,895	— 20,53,180
February "	6,60,46,660	+ 2,57,450	69,68,550	— 5,27,345
March "	6,67,07,095	+ 6,60,435	65,86,950†	— 3,81,600
TOTAL	79,29,30,625		10,08,74,700	
				Average for each
1862-63	2,42,30,000	.....	.....	.....
1863-64	2,49,50,000	.....	.....	.....
1864-65	2,80,55,141	.....	11,39,468	.....
1865-66	2,90,43,282	.....	25,61,730	.....
1866-67	2,83,91,438	.....	25,93,184	.....
1867-68	2,93,11,382	.....	32,48,513	.....
1868-69	3,96,45,643	.....	33,74,186	.....
1869-70	4,14,57,428	.....	30,97,881	.....
1870-71	3,50,93,392	.....	41,34,122	.....
1871-72	4,30,33,469	.....	36,60,324	.....
1872-73	4,78,04,952	.....	52,18,260	.....
1873-74	4,70,29,742	.....	73,86,899	.....
1874-75	4,84,38,619	.....	62,57,664	.....
1875-76	4,93,96,846	.....	69,97,957	.....
1876-77	4,99,71,204	.....	72,07,479	.....
1877-78	6,13,25,010	.....	54,65,639	.....
1878-79	6,43,65,560	.....	63,73,527	.....
1879-80	6,26,55,985	.....	47,91,777	.....
1880-81	6,54,05,717	.....	53,48,142	.....
1881-82	6,43,82,370	.....	72,19,658	.....
1882-83	7,15,64,195	.....	84,15,813	.....
1883-84	6,12,93,062	.....	69,21,029	.....
1884-85	6,57,43,221	.....	75,99,049	.....
1885-86	6,06,83,918	.....	60,15,686	.....
1886-87	5,72,39,275	.....	77,81,407	.....
1887-88	6,21,17,981	.....	88,36,324	.....
1888-89	6,60,77,552	.....	84,06,225	.....
Increase (+) or decrease (—) in 1888-89 as compared with 1887-88	+ 39,59,571	.....	— 4,30,099	.....
Percentage on average circulation, 1887-88.	+ 6.374	.....	— 4.867	.....
	MADRAS.		CALICUT.	
March 1888	1,97,98,825		7,84,755	
April "	2,18,21,110*	+ 20,22,285	9,93,130	+ 2,08,375
May "	1,93,41,820	— 24,79,290	9,65,560	— 27,570
June "	1,76,84,420	— 16,57,400	11,25,015	+ 1,59,455
July "	1,70,67,915	— 6,16,505	15,45,250	+ 4,20,235
August "	1,72,61,550	+ 1,93,635	15,75,150*	+ 29,900
September "	1,68,38,610†	— 4,22,940	12,21,145	— 3,54,005
October "	1,67,89,420	— 49,190	10,17,195	— 2,03,950
November "	1,91,01,465	+ 23,12,045	9,77,095	— 40,100
December "	1,94,01,650	+ 3,00,185	10,12,320	+ 35,225
January 1889	1,87,60,595	— 6,41,055	9,25,745†	— 86,575
February "	1,81,67,470	— 5,93,125	9,84,985	+ 59,240
March "	1,71,58,985	— 10,08,485	11,39,515	+ 1,54,530
TOTAL	21,93,95,010		1,84,82,105	
1862-63	41,35,714	.....	.....	.....
1863-64	66,50,000	.....	.....	.....
1864-65	61,81,761	.....	61,755	.....
1865-66	63,07,003	.....	4,21,160	.....
1866-67	67,97,750	.....	5,54,549	.....
1867-68	62,19,398	.....	5,56,109	.....
1868-69	71,21,806	.....	8,16,466	.....
1869-70	73,46,017	.....	7,70,240	.....
1870-71	87,56,321	.....	8,63,419	.....
1871-72	1,10,63,042	.....	11,96,533	.....
1872-73	1,07,03,116	.....	18,10,467	.....
1873-74	1,22,14,342	.....	22,08,618	.....
1874-75	99,92,176	.....	21,48,859	.....
1875-76	1,28,83,331	.....	25,38,768	.....
1876-77	1,36,59,999	.....	20,86,198	.....
1877-78	1,67,54,482	.....	21,89,267	.....
1878-79	1,52,45,985	.....	17,66,917	.....
1879-80	1,29,92,638	.....	18,00,536	.....
1880-81	1,35,26,580	.....	14,78,377	.....
1881-82	1,34,77,339	.....	15,35,584	.....
1882-83	1,34,72,861	.....	13,69,536	.....
1883-84	1,39,21,985	.....	10,43,825	.....
1884-85	1,33,48,674	.....	12,59,258	.....
1885-86	1,40,74,261	.....	12,12,091	.....
1886-87	1,60,49,242	.....	13,28,140	.....
1887-88	1,80,20,491	.....	11,46,155	.....
1888-89	1,82,82,918	.....	11,23,509	.....
Increase (+) or decrease (—) in 1888-89 as compared with 1887-88	+ 2,62,427	.....	— 22,646	.....
Percentage on average circulation, 1887-88.	+ 1.456	.....	— 1.975	.....

* Highest.

I.
circulation throughout India during 1888-89 and previous years.

LAHORE.		BOMBAY.		KURNALEE.	
Value of Notes in circulation.	Monthly increase+ or decrease—.	Value of Notes in circulation.	Monthly increase+ or decrease—.	Value of Notes in circulation.	Monthly increase+ or decrease—.
R	R	R	R	R	R
82,20,245		5,33,36,860		48,53,735	
87,99,185	+ 5,78,940	5,50,86,635	+ 17,49,775	49,86,660*	+ 1,34,925
92,36,665	+ 4,37,480	5,37,87,245	— 12,99,390	49,63,820	— 24,840
82,33,025	— 10,03,640	5,98,31,725	+ 60,44,480	42,98,390	— 6,65,430
87,95,260	+ 5,62,235	6,86,82,730	+ 88,51,005	39,06,640	— 3,91,750
95,79,770*	+ 7,84,510	7,05,98,395*	+ 19,15,665	36,65,260	— 2,41,380
82,95,655	— 12,84,115	6,57,75,970	— 48,22,425	39,22,895	+ 2,57,635
91,04,820	+ 8,09,165	5,60,33,555	— 97,42,415	38,67,275	— 55,620
80,37,815	— 10,67,005	4,43,91,570	— 1,16,41,985	34,65,925	— 4,01,350
81,24,150	+ 86,335	4,01,69,745†	— 42,21,825	33,86,810†	— 79,115
79,11,335	— 2,12,815	4,40,92,125	+ 39,22,380	36,63,140	+ 2,76,330
78,38,865†	— 72,470	4,15,95,255	— 24,96,870	39,41,195	+ 2,78,055
85,14,530	+ 6,75,665	5,03,27,005	+ 87,31,750	41,18,130	+ 1,76,935
10,24,71,075		65,03,71,955		4,81,88,140	
year from 1862-63.		1,58,28,571		.....
.....	.....	2,07,25,000	.....	.....
7,81,033	.....	3,26,00,958	.....	9,08,721	
29,51,182	.....	3,50,64,905	.....	10,13,765	
25,00,558	.....	4,80,41,935	.....	15,90,835	
24,05,652	.....	4,95,18,959	.....	19,67,010	
25,81,546	.....	4,59,48,670	.....	24,73,060	
22,52,897	.....	4,92,93,254	.....	22,59,591	
26,74,301	.....	4,43,51,094	.....	22,33,014	
52,34,625	.....	4,77,36,435	.....	20,30,310	
47,59,828	.....	5,63,13,434	.....	21,97,823	
47,77,161	.....	3,56,37,322	.....	17,28,919	
53,43,460	.....	3,27,94,374	.....	17,87,612	
66,21,276	.....	3,33,00,831	.....	18,40,533	
62,40,332	.....	3,54,10,793	.....	21,98,696	
54,70,648	.....	3,90,98,730	.....	25,13,693	
48,60,418	.....	3,67,78,984	.....	26,72,268	
65,49,450	.....	3,65,20,379	.....	34,61,504	
92,54,536	.....	3,81,54,498	.....	33,30,384	
81,32,864	.....	3,69,68,543	.....	32,37,773	
78,45,178	.....	4,59,01,757	.....	29,98,733	
76,69,764	.....	3,90,17,564	.....	30,89,570	
78,99,231	.....	4,44,12,529	.....	46,00,707	
77,28,230	.....	4,99,05,960	.....	49,99,546	
83,09,917	.....	4,29,10,249	.....	47,59,004	
91,59,344	.....	5,17,61,125	.....	40,15,679	
85,39,256	.....	5,41,97,663	.....	
— 6,20,088	.....	+ 24,36,538	.....	— 7,43,325	
— 6770	.....	+ 4707	.....	— 15,619	
RANGOON.		TOTAL.			
37,25,550		16,42,43,795			
28,28,340	— 8,97,210	16,54,08,185	+ 11,59,390		
30,03,505	+ 1,75,165	17,02,53,620	+ 48,50,435		
36,14,950	+ 6,11,445	17,68,91,005	+ 66,37,385		
32,23,530	— 3,91,420	18,05,53,135*	+ 36,62,130		
44,20,325	+ 11,96,795	17,69,17,285	— 36,35,850		
35,38,800	— 8,81,525	16,94,08,510	— 75,08,775		
41,65,935	+ 6,27,135	16,73,63,430	— 20,45,080		
51,70,710*	+ 10,04,775	15,50,43,510	— 1,23,19,920		
44,10,340	— 7,60,370	15,15,23,130	— 35,20,380		
41,24,410	— 2,85,930	15,27,62,455	+ 12,39,325		
27,55,075†	— 13,69,335	14,82,98,055†	— 44,64,400		
28,25,925	+ 70,850	15,73,78,135	+ 90,80,080		
4,40,81,845		1,97,17,95,455			
.....	.....	4,41,94,385			
.....	.....	5,23,25,000			
.....	.....	6,88,20,116			
.....	.....	7,72,57,988			
.....	.....	8,98,93,179			
.....	.....	9,23,50,848			
.....	.....	10,14,55,327			
.....	.....	10,66,90,777			
.....	.....	9,81,32,240			
.....	.....	11,41,57,442			
.....	.....	12,86,40,267			
.....	.....	11,14,52,907			
.....	.....	10,67,04,071			
.....	.....	11,35,26,621			
.....	.....	11,64,16,538			
.....	.....	13,25,02,472			
.....	.....	13,19,05,084			
.....	.....	12,79,83,033			
.....	.....	13,66,29,354			
.....	.....	13,50,46,242			
.....	.....	15,18,07,113			
10,03,295	.....	13,38,69,257			
20,55,743	.....	14,54,07,275			
29,31,184	.....	14,71,02,032			
33,93,174	.....	14,20,10,950			
58,22,866	.....	16,16,23,290			
36,73,487	.....	16,43,16,288			
— 21,49,379	.....	+ 26,92,998			
— 36912	.....	+ 1666			

† Lowest.

No.

Statement of Notes issued,

CIRCLE.	NATURE OF WORK.	5 RUPEES.		10 RUPEES.		20 RUPEES.		50
		No.	Value.	No.	Value.	No.	Value.	
Calcutta	Notes issued.	160,692	8,03,460	2,661,715	2,66,17,150	173,449	34,68,980	177,905
Allahabad	"	9,579	47,895	38,921	3,89,210	24,524	4,90,480	15,448
Lahore	"	11,253	56,265	63,568	6,35,680	45,528	9,10,560	31,565
Bombay	"	475,729	23,78,645	1,178,798	1,17,87,980	163,032	32,60,640	124,691
Kurrachee	"	2,634	13,170	33,796	3,37,960	12,964	2,59,280	7,302
Madras	"	89,650	4,48,250	147,320	14,73,200	85,716	17,14,320	72,346
Calicut	"	12,662	63,310	10,659	1,06,590	5,822	1,16,440	4,560
Rangoon	"	41,034	2,05,170	50,709	5,07,090	22,743	4,54,860	13,443
TOTAL		803,233	40,16,165	4,185,486	4,18,54,860	533,778	1,06,75,560	447,260
Percentage on Total Issues	{	10.83	...	56.44	...	7.20	...	6.03
	{ . . . . .	...	44	...	4.63	...	1.18	...
Calcutta	Notes received.	192,959	9,64,795	2,545,096	2,54,50,960	173,033	34,60,660	180,104
Allahabad	"	11,543	57,715	40,267	4,02,670	25,825	5,16,500	17,597
Lahore	"	13,547	67,735	69,315	6,93,150	49,568	9,91,360	30,396
Bombay	"	462,710	23,13,550	1,185,284	1,18,52,840	172,470	34,49,400	130,805
Kurrachee	"	2,886	14,430	26,564	2,65,640	9,447	1,88,940	5,791
Madras	"	85,799	4,43,995	148,361	14,83,610	87,102	17,42,040	76,360
Calicut	"	13,026	65,130	9,969	99,690	5,843	1,16,860	4,570
Rangoon	"	39,370	1,96,850	50,871	5,08,710	21,755	4,35,100	13,337
TOTAL		824,840	41,24,200	4,075,727	4,07,57,270	545,043	1,09,00,860	458,930
Percentage on Total Receipts	{	11.20	...	55.34	...	7.40	...	6.23
	{ . . . . .	...	45	...	4.47	...	1.20	...
Calcutta	Notes cancelled.	159,008	7,95,040	1,771,145	1,77,11,450	110,744	22,14,880	122,611
Allahabad	"	9,995	49,975	33,136	3,31,360	21,248	4,24,960	14,586
Lahore	"	14,020	70,100	63,610	6,36,100	42,980	8,59,600	28,319
Bombay	"	256,476	12,82,380	631,750	63,17,500	102,305	20,46,100	90,848
Kurrachee	"	2,815	14,075	23,973	2,39,730	8,847	1,76,940	4,937
Madras	"	87,493	4,37,465	146,801	14,68,010	83,008	16,60,160	71,436
Calicut	"	12,914	64,570	9,846	98,460	5,760	1,15,200	4,372
Rangoon	"	29,018	1,45,090	33,730	3,37,300	15,023	3,00,460	10,053
TOTAL		571,739	28,58,695	2,713,991	2,71,39,910	389,915	77,98,300	348,162
Percentage on Total Cancellations	{	11.16	...	53.00	...	7.61	...	6.80
	{ . . . . .	...	59	...	5.60	...	1.61	...
Percentage on Total Cancellations on Receipts		69.31	...	66.59	...	71.54	...	75.98

Abstract of all Circles

YEAR.	NOTES ISSUED.	
	No.	Value.
1861-62	367,200	4,20,00,000
1862-63	295,015	2,52,55,500
1863-64	336,201	4,72,01,000
1864-65	598,260	4,53,00,110
1865-66	960,150	10,10,04,920
1866-67	1,968,688	26,80,12,150
1867-68	2,790,745	38,06,49,710
1868-69	3,117,050	44,00,73,020
1869-70	3,396,828	49,34,48,480
1870-71	3,855,477	56,63,62,620
1871-72	4,045,118	62,25,21,200
1872-73	4,480,446	57,39,09,525
1873-74	4,915,365	61,69,24,575
1874-75	5,145,682	68,25,78,760
1875-76	5,325,790	62,69,70,815
1876-77	5,777,514	78,77,51,185
1877-78	6,251,704	99,52,50,980
1878-79	5,853,587	86,09,06,930
1879-80	6,252,415	81,51,93,855
1880-81	6,731,153	85,23,94,490
1881-82	6,066,875	71,68,22,915
1882-83	6,417,898	73,71,65,755
1883-84	6,828,374	67,02,69,920
1884-85	6,014,915	73,99,22,015
1885-86	6,610,519	76,10,25,730
1886-87	6,737,250	74,12,56,165
1887-88	7,234,682	83,20,40,665
1888-89	7,415,524	90,39,02,285

II.

received, and cancelled during 1888-89.

RUPEES.		100 RUPEES.		500 RUPEES.		1,000 RUPEES.		10,000 RUPEES.		TOTAL.	
Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.	Value.	No.
88,95,250	409,370	4,09,37,000	77,944	3,89,72,000	139,484	13,94,84,000	8,774	8,77,40,000	3,809,333	34,69,17,840	
7,72,400	22,824	22,82,400	3,874	19,37,000	8,985	89,85,000	1,687	1,08,70,000	125,242	2,57,74,385	
15,78,250	44,567	44,56,700	9,774	48,87,000	7,766	77,66,000	1,551	1,55,10,000	215,572	3,58,00,455	
62,34,550	209,242	2,09,24,200	12,481	62,40,500	97,293	9,72,93,000	17,362	17,36,20,000	2,278,628	32,17,39,515	
3,65,100	10,655	10,65,500	1,060	5,30,000	4,046	40,46,000	144	14,40,000	72,601	80,57,010	
36,17,300	246,162	2,46,16,200	36,178	1,80,89,000	30,488	3,04,88,000	4,344	4,34,40,000	712,204	12,38,86,270	
2,28,000	10,126	10,12,600	501	2,50,500	418	4,18,000	195	19,50,000	44,943	41,45,440	
6,72,150	20,296	20,29,600	2,237	11,18,500	3,644	36,44,000	2,895	2,89,50,000	157,001	3,75,81,370	
2,23,63,000	973,242	9,73,24,200	144,049	7,20,24,500	292,124	29,21,24,000	36,352	36,35,20,000	7,415,524	90,39,02,285	
...	13.13	...	1.94	...	3.94	...	.49	...	100	...	
2.47	...	10.77	...	7.97	...	32.32	...	40.22	...	100	
90,05,200	406,043	4,06,04,300	79,535	3,97,67,500	140,691	14,06,91,000	8,599	8,59,90,000	3,726,060	34,59,34,415	
8,78,350	25,290	25,29,000	4,137	20,68,500	8,551	85,51,000	1,348	1,34,80,000	134,528	2,84,83,735	
15,19,800	44,119	44,11,900	9,512	47,56,000	7,737	77,37,000	1,545	1,54,50,000	225,739	3,56,26,945	
65,40,250	217,337	2,17,33,700	14,010	70,05,000	97,794	9,77,94,000	17,341	17,34,10,000	2,297,751	32,40,98,740	
2,89,550	10,619	10,61,900	890	4,45,000	4,185	41,85,000	233	23,30,000	60,615	87,80,460	
38,18,000	250,092	2,50,09,200	36,791	1,83,95,500	31,455	3,14,55,000	4,420	4,42,00,000	723,380	12,65,47,345	
2,28,500	9,003	9,00,300	446	2,23,000	401	4,01,000	178	17,80,000	43,436	38,14,480	
6,66,850	19,944	19,94,400	2,132	10,66,000	3,462	34,62,000	3,015	3,01,50,000	153,886	3,84,79,910	
2,29,46,500	982,447	9,82,44,700	147,453	7,37,26,500	294,276	29,42,76,000	36,679	36,67,90,000	7,365,395	91,17,66,030	
...	13.34	...	2.00	...	3.99	...	.50	...	100	...	
2.52	...	10.77	...	8.09	...	32.27	...	40.23	...	100	
61,30,550	311,002	3,11,00,200	70,731	3,53,65,500	105,097	10,50,97,000	1,726	1,72,60,000	2,652,064	21,56,74,620	
7,29,300	20,471	20,47,100	3,426	17,13,000	6,463	64,63,000	865	86,50,000	110,190	2,04,08,695	
14,65,950	42,992	42,99,200	9,395	46,97,500	6,971	69,71,000	480	48,00,000	209,767	2,37,99,450	
45,42,400	151,341	1,51,34,100	13,076	65,38,000	51,823	5,18,23,000	4,012	4,01,20,000	1,301,631	12,78,03,480	
2,46,850	9,444	9,44,400	828	4,14,000	2,528	25,28,000	179	17,90,000	53,551	63,53,995	
35,71,800	208,038	2,08,03,800	30,935	1,54,67,500	17,622	1,76,22,000	1,503	1,50,30,000	646,836	7,60,60,735	
2,18,600	8,695	8,69,500	408	2,04,000	356	3,56,000	146	14,60,000	42,497	33,86,330	
5,02,650	13,677	13,67,700	1,260	6,30,000	1,369	13,69,000	557	55,70,000	104,687	1,02,22,200	
1,74,08,100	765,660	7,65,66,000	130,059	6,50,29,500	192,229	19,22,29,000	9,468	9,46,80,600	5,121,223	48,37,09,505	
...	14.95	...	2.54	...	3.75	...	.19	...	100	...	
3.60	...	15.83	...	13.45	...	39.74	...	19.58	...	100	
...	77.93	...	88.20	...	65.32	...	25.81	...	69.58	53.05	

from 1861-62 to 1888-89.

NOTES RECEIVED.		NOTES CANCELLED.	
No.	Value.	No.	Value.
2,900	10,00,000	...	...
82,820	1,49,55,500	52,520	1,10,05,500
248,582	4,17,01,000	240,478	3,74,51,000
253,708	3,37,69,900	214,290	3,15,66,660
854,111	9,98,39,180	386,174	3,90,71,620
1,917,381	25,36,97,220	831,631	7,50,95,040
2,424,319	30,72,64,270	998,679	10,85,26,500
2,936,353	44,69,90,180	1,553,433	14,25,85,600
3,353,591	48,70,24,340	1,906,794	22,30,04,250
3,728,082	56,66,28,810	2,005,842	24,79,56,750
3,813,861	60,48,10,940	1,894,516	25,64,60,160
4,194,119	59,96,88,825	2,150,039	25,00,27,590
4,620,018	62,64,55,900	2,565,830	26,20,42,890
4,762,530	63,66,57,570	3,094,093	28,68,65,125
5,269,541	62,17,81,655	3,500,388	29,62,56,840
5,702,046	77,87,26,475	3,661,384	37,89,18,425
6,120,202	96,25,97,735	4,399,755	45,50,76,735
6,036,955	90,75,19,920	4,115,911	42,84,16,310
6,067,688	80,79,23,265	3,889,150	35,31,49,630
6,625,315	84,04,84,390	4,172,534	38,61,13,350
5,964,017	71,09,97,175	3,855,555	37,95,01,280
6,164,317	73,16,24,485	4,344,957	43,60,02,315
6,769,657	68,93,02,090	4,710,289	42,04,58,825
9,692,313	72,12,80,855	5,137,324	43,21,77,545
6,531,341	76,55,44,465	4,756,480	42,79,23,405
6,657,354	74,47,96,640	4,856,427	42,80,60,590
6,873,377	80,55,70,115	4,892,465	46,06,32,630
7,365,395	91,17,66,030	5,121,223	48,37,09,505

No.

Statement of Receipts and Expenditure of the Department

	Calcutta.	Allahabad.	Lahore.
RECEIPTS.	<i>R</i> <i>a. p.</i>	<i>R</i> <i>a. p.</i>	<i>R</i> <i>a. p.</i>
1888-89. Interest realized on Government Securities	10,74,161 6 0	1,16,145 0 0	1,38,219 9 0
SUNDY CASH RECEIPTS.			
Miscellaneous	248 15 3	107 12 0	93 4 0
Premium realized on bills . . . . .	.....	2,255 0 0	1,920 0 0
Value of unclaimed Currency Notes . . . . .	.....	.....	.....
	10,74,410 5 3	1,18,507 12 0	1,40,232 4 0
DISBURSEMENTS.			
Salaries	20,261 5 1	.....	3,278 9 0
Establishment	74,631 4 11	10,553 0 0	9,304 12 3
Temporary Establishment	8,685 10 8	619 14 1	.....
Charges for Remittances	217 12 0	.....	.....
Stationery	1,368 5 3	6 13 3	.....
Printing Charges	2,732 12 2	527 0 0	595 8 4
Service Telegrams	348 7 0	199 11 0	299 12 0
Purchase of Service Stamps	788 13 6	310 0 0	333 1 6
House, Lighting, Police and Water Rate	5,550 0 0	.....	127 4 6
Cost of Note Forms	59,916 14 0	.....	.....
One-third freight on Europe Stores	4,452 13 0	1,548 0 0	1,189 7 1
Pensions and Gratuities	773 0 0	.....	4,427 0 0
Cost of Repairs, &c., to Currency Buildings	33 10 0	1,866 15 0	190 4 5
Cost of Chests, Bags and Locks	4,735 9 6	1,131 5 3	1,428 11 0
Contingencies	177 12 9	.....	.....
Travelling Allowances	237 10 9	358 9 6	.....
Dead Stock, Cost of Office Furniture . . . . .	.....	.....	.....
TOTAL DISBURSEMENTS DURING 1888-89	1,84,911 12 7	17,121 4 1	21,174 6 1
PROFIT	8,89,498 8 8	1,01,386 7 11	1,19,057 13 11

ABS

	Calcutta.	Allahabad.	Lahore.
RECEIPTS.	<i>R</i> <i>a. p.</i>	<i>R</i> <i>a. p.</i>	<i>R</i> <i>a. p.</i>
1861-62 . . . . .	.....	.....	.....
1862-63	1,52,316 10 2	.....	.....
1863-64	3,27,731 5 4	.....	.....
1864-65	9,69,318 4 4	.....	.....
1865-66	6,05,285 1 8	46,281 6 0	31,484 2 0
1866-67	6,91,286 13 6	49,784 0 0	31,517 0 0
1867-68	5,32,863 9 9	45,617 9 4	28,944 4 9
1868-69	5,81,265 0 9	49,442 8 3	37,827 13 5
1869-70	6,50,288 12 3	48,310 9 8	35,133 4 11
1870-71	5,36,277 7 6	62,787 2 7	40,616 1 1
1871-72	5,38,378 2 9	45,512 7 6	65,087 5 3
1872-73	8,91,423 8 3	96,879 10 9	88,368 10 6
1873-74	10,04,194 6 0	1,56,749 4 0	1,01,370 14 0
1874-75	11,87,241 11 6	89,036 0 0	1,10,593 7 3
1875-76	10,92,800 4 6	1,13,676 0 0	1,28,291 10 9
1876-77	10,74,581 8 0	1,09,322 0 0	1,34,781 10 0
1877-78	11,80,679 7 8	1,12,726 0 0	1,11,997 10 9
1878-79	12,35,775 6 10	85,487 2 0	94,621 11 0
1879-80	13,93,856 3 11	99,873 6 0	1,31,198 12 3
1880-81	12,55,051 0 0	89,304 0 0	1,69,020 0 0
1881-82	12,65,842 12 2	85,948 4 0	1,55,632 3 6
1882-83	12,99,622 0 0	1,11,111 10 0	1,24,487 8 6
1883-84	12,21,167 2 7	1,11,492 4 0	1,56,363 0 0
1884-85	11,41,524 9 3	1,11,237 9 3	1,53,062 0 0
1885-86	11,13,313 12 0	1,01,087 11 0	1,45,189 8 6
1886-87	10,77,399 13 0	1,22,840 5 3	1,51,106 9 3
1887-88	10,54,140 8 1	1,05,649 3 6	1,51,760 15 0
1888-89	10,74,410 5 3	1,18,507 12 0	1,40,232 4 0
TOTAL	2,51,48,035 11 0	21,68,663 13 1	25,18,688 6 8
DISBURSEMENTS.			
1861-62	2,639 2 7	.....	.....
1862-63	3,06,205 8 3	.....	.....
1863-64	1,40,049 4 11	.....	.....
1864-65	34,145 8 6	20,329 12 2	17,539 13 0
1865-66	4,00,080 5 2	17,824 12 9	21,500 13 3
1866-67	5,27,735 4 11	13,488 3 2	16,999 6 3
1867-68	90,086 0 0	17,230 12 10	20,862 13 7
1868-69	5,71,781 12 9	14,792 14 4	15,285 6 4
1869-70	99,909 12 7	14,991 8 11	16,687 14 6
1870-71	1,30,679 3 7	15,505 1 4	13,726 6 9
1871-72	1,02,321 6 2	14,457 12 6	19,870 1 1
1872-73	1,27,751 14 3	20,576 5 10	11,243 6 7
1873-74	1,65,462 14 5	51,683 12 7	14,189 4 6
1874-75	1,36,395 6 10	21,920 7 4	22,072 3 8
1875-76	1,26,771 7 8	44,446 5 4	13,937 10 8
1876-77	1,47,884 0 11	19,322 1 0	10,443 14 9
1877-78	1,82,693 11 4	13,346 14 3	18,445 5 1
1878-79	2,38,041 12 0	16,616 9 5	14,376 5 0
1879-80	1,41,472 1 5	14,744 12 3	15,044 15 6
1880-81	1,21,867 0 0	14,910 0 0	14,851 0 0
1881-82	1,48,717 0 3	21,755 1 10	17,482 14 9
1882-83	2,61,461 7 4	19,251 9 5	14,632 14 8
1883-84	2,23,388 9 8	18,552 10 7	14,967 0 10
1884-85	1,28,143 10 8	22,857 10 11	15,118 12 5
1885-86	2,77,996 11 3	19,432 6 4	21,852 11 1
1886-87	1,86,623 15 1	18,043 9 5	17,570 1 4
1887-88	2,34,563 9 3	16,721 1 7	13,811 14 1
1888-89	1,84,911 12 7	17,121 4 1	21,174 6 1
TOTAL	54,39,780 6 4	4,99,943 8 2	4,13,687 7 9
PROFIT	1,97,08,255 4 8	16,68,720 4 11	21,05,000 14 11

The following are the Circles in which the Final Disbursements

Calcutta Approximate	2,34,563 9 3
„ Final	2,34,876 13 3
Lahore Approximate	13,811 14 1
„ Final	18,068 8 7
Bombay Approximate	79,863 1 7
„ Final	80,589 12 8
Kurrachee Approximate	6,215 0 3
„ Final	7,900 12 3
Madras Approximate	37,161 13 10
„ Final	39,004 14 0

Final Increase as compared

III.

of Issue of Paper Currency for the year 1888-89.

Bombay.	Kurrachee.	Madras.	Calicut.	Rangoon.	TOTAL.
R. a. p.	R. a. p.	R. a. p.	R. a. p.	R. p. a.	R. a. p.
7,08,296 0 0	59,718 0 0	2,96,908 0 0	16,323 0 0	48,579 0 0	24,58,349 6 0
556 5 6	264 10 11	196 4 0	.....	.....	1,467 3 8
1,187 8 0	.....	1,085 0 0	.....	.....	1,187 8 0
850 0 0	.....	2,98,189 4 0	16,323 0 0	48,579 0 0	6,110 0 0
7,10,889 13 6	59,982 10 11	.....	.....	.....	24,67,114 1 8
12,000 0 0	1,200 0 0	.....	1,200 0 0	.....	37,939 14 1
53,716 3 6	4,439 0 0	17,505 1 9	3,278 4 2	16,518 3 2	1,89,945 13 9
3,257 13 5	.....	15 10 9	.....	559 2 3	13,138 3 2
359 5 0	67 8 0	143 10 0	.....	.....	788 3 0
647 0 0	28 4 10	402 1 4	23 6 0	.....	2,475 14 8
1,332 3 5	48 14 6	821 6 3	.....	.....	6,057 12 8
238 2 0	63 5 0	101 2 0	39 11 0	193 5 0	1,483 7 0
530 6 0	180 1 0	266 5 0	105 0 0	35 1 0	2,548 12 0
944 3 9	.....	18,492 3 4	1,066 0 8	.....	6,621 8 3
.....	.....	15 1 7	498 0 0	.....	79,475 2 0
22 6 2	.....	2,516 13 8	.....	.....	37 7 9
1,150 0 0	.....	.....	.....	.....	11,355 1 9
345 3 5	.....	869 13 4	62 2 6	.....	5,545 3 5
2,000 0 0	.....	436 14 4	76 4 2	848 5 3	4,090 13 5
3,359 6 11	145 7 9	295 9 11	.....	100 0 0	12,580 13 6
263 1 0	10 10 0	41,881 13 3	6,348 12 6	.....	888 6 1
493 0 6	30 0 0	.....	9,974 3 6	18,263 0 8	1,600 2 10
80,658 7 1	6,213 3 1	2,56,307 6 9	.....	30,315 15 4	3,76,572 11 4
6,30,231 6 5	53,769 7 10	.....	.....	.....	20,90,541 6 4

TRACTS.

Bombay.	Kurrachee.	Madras.	Calicut.	Rangoon.	TOTAL.
R. a. p.	R. a. p.	R. a. p.	R. a. p.	R. a. p.	R. a. p.
5,11,746 13 6	.....	1,73,913 14 10	.....	.....	1,52,316 10 2
8,19,518 4 3	4,637 7 9	1,67,917 2 10	.....	.....	3,27,731 5 4
7,43,596 2 1	23,870 0 0	1,18,395 11 4	3,268 2 0	.....	16,54,979 0 8
5,92,489 15 5	20,677 12 5	1,21,084 15 9	4,400 0 0	.....	16,78,391 10 6
6,73,293 8 10	28,822 15 1	1,04,357 0 5	4,137 1 3	.....	16,62,849 10 11
7,69,001 5 11	38,566 11 1	1,14,559 2 3	11,963 12 11	.....	13,45,815 4 8
6,73,769 3 4	34,317 10 3	1,32,986 14 7	12,011 10 11	.....	14,86,972 11 8
5,93,668 4 7	27,765 4 9	1,40,676 4 1	13,113 3 5	.....	16,67,871 9 0
10,45,520 1 7	37,693 12 6	1,98,729 6 9	14,877 11 0	.....	14,93,867 10 9
7,56,230 12 9	46,985 0 3	2,59,187 1 3	33,612 4 0	.....	14,25,965 7 11
6,77,999 6 4	35,660 12 0	2,19,693 3 0	46,866 10 3	.....	23,92,227 6 4
6,57,503 6 6	36,340 0 0	2,53,336 8 8	49,770 0 0	.....	23,71,584 0 6
7,01,084 13 8	40,050 1 6	2,69,536 3 6	55,570 0 0	.....	23,69,994 8 1
6,59,869 12 10	35,533 13 0	3,10,976 0 0	39,443 0 0	.....	23,67,517 14 5
6,52,369 0 4	47,607 0 0	2,51,697 8 0	37,865 0 0	.....	23,68,799 4 8
7,72,780 3 3	54,105 0 0	3,09,420 0 8	27,938 0 0	.....	24,49,647 12 3
6,96,539 0 0	62,088 0 0	2,20,031 0 0	35,592 0 0	.....	23,95,495 12 2
6,64,791 11 11	60,126 0 0	2,46,642 15 5	22,785 0 0	.....	27,96,825 10 1
6,82,831 3 0	54,736 0 0	2,14,922 14 10	24,016 0 0	.....	25,14,818 0 0
6,93,775 7 1	50,446 12 0	2,39,524 7 10	14,854 0 0	.....	25,02,999 15 0
7,65,661 1 9	55,927 9 6	2,43,696 15 0	18,828 0 0	17,260 0 0	25,02,565 4 4
7,88,374 2 7	83,818 13 4	2,35,080 5 9	16,324 0 0	23,476 0 0	25,08,857 1 6
7,65,888 0 0	76,816 0 0	2,65,096 2 3	15,802 0 0	21,245 0 0	25,10,909 12 9
7,57,626 6 0	71,000 7 0	3,02,655 0 0	19,177 0 0	24,114 0 0	25,03,861 5 2
7,10,889 13 6	59,982 10 11	2,98,189 4 0	14,628 0 0	24,114 0 0	25,02,437 13 9
1,78,56,818 1 0	10,87,575 9 4	54,12,256 3 0	16,323 0 0	52,623 0 0	25,10,083 7 7
.....	.....	.....	5,53,165 7 9	48,579 0 0	24,67,114 1 8
2,494 10 0	.....	751 9 3	.....	.....	549,32,500 3 10
1,73,996 6 6	.....	50,610 10 1	.....	.....	5,885 5 10
1,66,720 11 11	.....	58,638 2 3	.....	.....	5,30,812 8 10
2,61,955 7 8	.....	59,511 2 6	3,112 11 4	.....	3,65,408 10 4
3,06,084 4 8	9,596 11 8	78,872 13 10	11,132 8 5	.....	3,96,594 6 11
3,58,829 8 3	8,632 0 0	61,950 15 6	4,667 12 8	.....	8,45,092 5 9
1,29,160 8 5	10,509 12 11	36,798 8 6	4,657 14 4	.....	9,92,303 2 9
1,12,952 8 4	10,517 15 3	30,912 2 6	4,695 15 6	.....	3,09,306 6 7
1,32,816 11 10	7,711 15 0	33,335 4 5	4,407 0 1	.....	7,60,938 11 0
1,21,404 7 7	5,922 4 1	44,446 15 1	5,417 11 2	.....	2,89,860 3 4
1,02,736 7 5	6,038 0 2	34,553 0 1	5,417 14 0	.....	3,36,231 1 7
99,551 13 8	7,225 11 5	39,798 3 9	7,367 15 0	.....	2,85,394 9 5
1,64,282 3 4	9,157 11 10	45,101 5 3	6,098 14 0	.....	3,13,515 6 5
1,50,860 9 2	6,097 0 2	43,460 9 0	9,037 5 6	.....	4,55,976 2 0
1,02,627 5 0	6,670 11 3	35,306 1 0	5,568 2 3	.....	3,89,843 9 8
86,264 8 2	7,635 7 6	35,215 10 6	6,891 3 11	.....	3,35,327 11 2
2,23,222 6 1	7,100 7 0	33,239 12 8	6,944 7 0	.....	3,13,656 14 9
1,92,575 6 9	8,534 5 8	41,871 7 1	6,894 5 5	.....	4,84,992 15 5
1,00,247 4 8	7,456 6 8	39,214 6 8	5,621 13 11	.....	5,18,910 3 4
82,161 0 0	5,716 0 0	33,697 0 0	4,934 0 0	.....	3,23,801 13 1
78,796 0 4	7,703 4 4	42,480 1 4	7,828 4 1	.....	2,78,136 0 0
83,441 8 11	7,553 3 2	32,512 5 11	6,451 9 11	.....	3,24,762 10 11
98,933 12 7	6,335 4 9	49,448 0 10	5,643 2 2	.....	4,25,804 11 4
94,890 6 5	7,106 11 7	29,430 11 9	5,390 5 6	10,638 4 4	4,27,906 13 9
83,212 8 2	8,983 15 1	43,142 2 4	6,357 13 4	14,234 8 4	3,17,172 13 7
78,853 7 6	7,750 9 2	43,847 10 11	7,414 2 7	14,906 15 1	4,75,905 2 8
79,863 1 7	6,215 0 3	37,161 13 10	7,105 13 2	13,613 0 0	3,73,716 8 0
80,658 7 1	6,213 3 1	41,881 13 3	6,348 12 6	16,599 4 4	4,12,041 10 1
37,29,593 10 0	1,82,383 12 0	11,57,190 15 1	1,54,536 9 9	18,263 0 8	3,76,572 11 4
1,41,27,224 7 0	9,05,191 13 4	42,55,065 3 11	3,98,618 14 0	88,255 0 9	1,16,65,371 5 10
.....	.....	.....	.....	99,041 15 3	4,32,67,128 14 0

differed from approximate figures reported in 1887-88:—

313 4 0

4,256 10 6

726 11 1

1,085 12 0

4,569 14 6

1,812 7 1

1,843 2 0

8,225 5 9

with Approximate.

No. IV.

Classification of Treasuries according to Encashment of Notes.

A			B			C			A	B	C
Treasuries which were able throughout the year to cash notes at all times to the extent of the public demand on them.			Treasuries ordinarily able to cash notes on presentation.			Treasuries at which this accommodation could not usually be given.					
			India.								
Ajmeer.	Bhopal.	Sambhar.				Coorg.	Indore.	Nowgong (Bd.)	4	0	3
Beluchistan.											
			Central Provinces.								
Balaghat.	Damoh.	Narsinghpur.	Bilaspur.	Jabalpur.	Sambalpur.						
Betul.	Hoshangabad.	Nimar.	Chhindwara.	Raipur.	Seoni.						
Bhandara.	Mandla.	Saugor.									
Chanda.	Nagpur.	Wardha.							12	6	0
			Burma.								
Bassein.	Mergui.	Shwegin.	Mandalay.	Pokkoku.	Thayetmyo.	Bernardmyo.	Kyauksai.	Shwebo.			
Kyaukphayoo.	Pegu.	Tavoy.	Minbu.	Pyinmana.	Toungthoo.	Bhamo.	Magwe.	Yemethin.			
Maubin.	Saudoway.	Tharrawaddy.	Myingyan.	Sagam.		Katha.	Meiktila.	Yeu.	11	8	11
						Kindat.	Monywa.				
			Assam.								
						Cachar.	Kamrup.	Naga Hills.			
						Darrang.	Khasi Hills.	Nowgong.			
						Garo Hills.	Lakhimpur.	Sibsagar.	0	0	12
						Goalparah.	Manipur.	Sylhet.			
			Bengal.								
Backergunge.	Gya.	Noakhally.	Moorsheda-	Chumparun.	Manbhoom.	Darjeeling.					
Balasore.	Hazaribagh.	Nuddea.	bad.	Jalpaiguri.	Singbhoom.						
Bankoora.	Hooghly.	Pubna.									
Beerbhoom.	Howrah.	Puri.									
Bhagulpore.	Jessore.	Purneah.									
Bogra.	Khoolna.	Rajshahye.									
Burdwan.	Lohardugga.	Rungpur.									
Chittagong.	Maldah.	Saran.									
Cuttack.	Midnapore.	Shahabad.									
Dinagepore.	Monghyr.	Tipperah.									
Doomka.	Mozufferpore.	24-Pergunnahs.									
Durbhunga.	Mymensing.										
Furreedpore.											
			N.-W. P. & Oudh.						36	5	1
Aligarh.	Farukhabad.	Mainpuri.	Allahabad.	Jalaun.	Rurki.	Agra.	Benares.	Nainital.			
Azamgarh.	Fatehpur.	Meerut.	Bahraich.	Mathura.	Saharanpur.	Almora.	Dehra-Dun.	Pilibhit.			
Badaun.	Ghazipur.	Mirzapore.	Etawah.	Moradabad.	Sitapur.						
Balia.	Gorakhpur.	Muzaffarnagar.	Faizabad.								
Banda.	Gonda.										
Bara Banki.	Hamirpur.	Partabgarh.									
Bareilly.	Hardoi.	Rae Bareli.									
Basti.	Jaunpur.	Shahjahanpur.									
Bijnor.	Jhansi.										
Bulandshahr.	Kheri.	Sultanpur.									
Cawnpore.	Lalitpur.	Unao.									
Etah.	Lucknow.										
			Punjab.						33	10	6
Amritsar.	Hissar.	Montgomery.	Bannu.	Kangra.	Umballa.	Dera Ghazi Khan.	Muzaffargarh.				
Dera Ismail Khan.	Hoshiarpur.	Multan.	Gurdaspur.	Rohtack.							
Ferozepur.	Jhang.	Peshawar.									
Gujranwala.	Jhelum.	Rawal Pindi.									
Gujrat.	Jullundur.	Shahpur.									
Gurgaon.	Kernal.	Sialkot.									
Hazara.	Kohat.	Simla.									
	Ludhiana.										
			Madras.						22	5	2
Anuntapur.	Nellore.	Tinnevely.	Bellary.	Ganjam.	Malabar.	Bangalore.	Kistna.	Nilgris.			
Chingleput.	North Arcot.	Travancore.	Coimbatore.	Godavari.	South Canara.						
Cuddapah.	Salem.	Trichinopoly.									
Kurnool.	South Arcot.	Vizagapatam.									
Madura.	Tanjore.										
			Bombay.						14	6	3
Aden.	Hyderabad (Sind).	Nasik.									
Ahmednagar.	Kaira.	Ratnagiri.				Cutch (Bhuj).	Shikarpur.				
Baroda.	Kanara (Karwar).	Satara.									
Belgaum.		Sholapur.									
Bijapur.	Kathiawar.	Surat.									
Colaba.	Khauddesh.	Thana.									
Dharwar.									18	0	2
			Hyderabad.								
						Akola.	Basim.	Ellichpur.			
						Amraoti.	Buldana.	Wun.	0	0	6
			</								

No. V.

Statistics of Treasury and other Balances on 31st December 1888.

	DENOMINATIONS OF NOTES.										TOTAL.		PERCENTAGE OF NOTES.	
	R5.	R10.	R20.	R50.	R100.	R500.	R1,000.	R10,000.	Foreign Circle Notes.	Notes.	Cash.	TOTAL.	Dec. 1888.	Dec. 1887.
<i>Treasuries and Branch Banks.</i>														
Calcutta Circle	33,435	4,47,040	1,50,140	3,42,900	10,15,200	4,90,000	8,43,000	11,90,000	9,630	45,21,345	88,13,989	1,33,35,334	33	39
Allahabad	17,500	49,710	66,080	90,750	1,55,800	1,54,000	3,25,000	...	7,11,675	15,71,515	1,26,03,467	1,41,74,982	11	9
Lahore	18,250	67,800	97,300	1,50,100	3,12,100	3,17,500	3,80,000	2,70,000	2,09,920	18,22,970	77,35,608	95,58,578	19	15
Bombay	29,760	1,83,060	63,260	1,47,500	4,39,100	1,39,000	2,13,000	15,18,210	75,655	28,08,545	65,00,224	93,72,769	29	40
Nagpore	3,010	35,710	8,720	34,350	1,56,700	77,000	18,000	...	68,530	4,02,020	36,37,561	40,19,581	10	8
Kurrachee	3,675	28,960	26,940	42,800	1,23,300	59,000	2,70,000	...	13,735	5,68,110	8,99,347	14,67,457	38	48
Madras	19,575	86,580	63,760	1,67,550	8,00,300	1,61,500	1,59,000	12,70,000	1,03,600	28,31,865	80,65,649	1,08,97,514	25	18
Calicut	5,360	10,100	12,020	18,450	55,500	9,500	6,000	50,000	1,65,335	3,32,265	15,96,496	19,28,761	17	23
Central India	3,255	26,580	6,580	25,750	69,200	53,500	78,000	...	15,910	2,78,775	17,08,677	19,87,452	14	7
Burma	6,255	13,510	23,780	35,900	82,100	22,500	1,29,000	7,10,000	21,790	10,44,885	51,78,787	62,23,622	16	59
	1,40,075	9,49,050	5,18,580	10,56,050	32,09,000	14,83,500	24,22,000	50,08,210	13,95,780	1,61,82,245	5,67,53,805	7,29,66,050	22	27
<i>Presidency Banks Head Offices.</i>														
Bank of Bengal	13,465	1,32,200	37,340	45,550	1,92,100	6,81,000	24,13,000	44,70,000	...	80,34,555	7,35,897	87,70,552	91	92
Do. of Bombay	15,130	2,01,910	1,99,220	1,43,850	2,32,300	2,77,000	22,26,000	12,10,000	11,300	44,56,710	7,48,423	52,05,133	85	99
Do. of Madras	7,725	24,550	22,100	25,900	2,46,600	1,35,500	2,55,000	4,60,000	25,110	12,02,485	11,25,899	23,28,384	51	75
	36,320	4,08,660	1,98,660	2,15,300	6,71,000	10,93,500	48,94,000	61,40,000	36,410	1,36,93,850	25,10,219	1,63,04,069	83	94

No. VI.

Issues and Receipts of Home Notes at each Circle.

	CIRCLES.								Total.
	Calcutta.	Allahabad.	Lahore.	Bombay.	Karrachee.	Madras.	Calicut.	Rangoon.	
Circulation on 1st April 1888	6,61,64,000	95,10,315	89,06,615	5,37,17,740	49,02,850	2,00,45,200	8,70,445	37,42,850	16,78,60,015
ISSUES.									
Over the Counter	30,07,73,340	2,14,50,385	2,00,00,455	29,89,34,715	76,27,010	10,06,26,865	41,45,440	1,74,14,470	77,09,71,680
At Agencies	17,500	...	68,23,000	6,67,000	...	6,73,000	...	4,27,900	86,08,400
In Remittance Transactions	4,61,28,000	43,24,000	89,77,000	2,21,37,800	4,30,000	2,25,86,405	...	1,97,39,000	12,43,22,205
TOTAL ISSUES	34,69,17,840	2,57,74,385	3,58,00,455	32,17,39,515	80,57,010	12,38,86,270	41,45,440	3,75,81,370	90,39,02,285
TOTAL OF BALANCE AND ISSUES	41,30,81,840	3,52,84,700	4,47,07,070	37,54,57,255	1,29,59,860	14,39,31,470	50,15,885	4,13,24,220	1,07,17,62,300
RECEIPTS.									
Over the Counter	30,33,67,795	1,51,03,565	1,45,29,550	19,47,24,555	51,82,000	10,66,70,450	10,17,760	2,37,11,725	66,43,07,460
At Agencies	2,95,500	...	5,31,000	7,13,100	...	5,96,000	...	20,000	21,55,600
From other Currency Circles	1,17,66,120	1,13,05,670	89,90,545	1,81,30,475	35,98,400	69,53,895	27,96,720	9,14,785	6,44,58,610
In Remittance Transactions	3,05,05,000	20,74,500	1,15,75,850	11,05,30,610	...	1,23,25,000	...	1,38,33,400	18,08,44,360
TOTAL RECEIPTS	34,59,34,415	2,84,83,735	3,56,26,945	32,40,98,740	87,80,460	12,65,47,345	38,14,480	3,84,79,910	91,17,66,030
BALANCE IN CIRCULATION ON 31st MARCH 1889	6,71,47,425	68,00,965	90,80,125	5,13,58,515	41,79,400	1,73,84,125	12,01,405	28,44,310	15,99,96,270

No. VII.

Issues and Receipts of Coin at each Circle.

	CIRCLES.										TOTAL.							
	Calcutta.	Allahabad.	Lahore.	Bombay.	Kurrachee.	Madras.	Calicut.	Rangoon.										
	R	a. p.	R	a. p.	R	a. p.	R	a. p.	R	a. p.								
Balance on 1st April 1888	2,06,97,777	15 11	83,46,135	0 0	97,86,815	0 0	3,12,90,563	15 6	48,01,295	0 0	1,52,60,885	0 0	2,20,445	0 0	40,71,310	0 0	9,44,81,226	15
Receipts—Over the Counter	3,84,65,470	0 0	1,18,12,055	0 0	67,05,720	0 0	9,71,51,845	0 0	24,00,875	0 0	1,46,24,905	0 0	24,21,960	0 0	1,05,63,275	0 0	18,41,46,105	0 0
" From Small Coin Account	.....	.....	.....	.....	.....	.....	21,85,774	0 0	85,400	0 0	2,20,000	0 0	.....	.....	.....	.....	24,91,174	0 0
" At Agencies	3,00,000	0 0	.....	.....	68,23,000	0 0	6,59,000	0 0	.....	.....	6,18,500	0 0	.....	.....	4,27,900	0 0	88,28,400	0 0
" In Remittance Transactions	6,20,59,546	12 0	1,14,25,500	0 0	1,10,85,000	0 0	47,07,000	0 0	31,18,000	0 0	1,23,50,810	0 0	3,25,000	0 0	1,15,55,000	0 0	11,66,25,856	12 0
" For Mint Certificates	22,55,456	14 5	.....	.....	.....	.....	516	13 4	.....	.....	.....	.....	.....	.....	.....	.....	22,55,373	11 9
TOTAL RECEIPTS	10,30,80,473	10 5	2,82,37,555	0 0	2,46,13,720	0 0	10,47,04,135	13 4	56,04,275	0 0	2,78,14,215	0 0	27,46,960	0 0	2,25,46,175	0 0	31,43,47,569	7 9
TOTAL OF BALANCES AND RECEIPTS	12,37,78,251	10 4	3,15,83,690	0 0	3,44,00,535	0 0	13,60,03,699	12 10	1,04,05,570	0 0	4,30,75,100	0 0	29,67,405	0 0	2,66,17,485	0 0	40,88,31,736	7 2
Issues—Over the Counter	7,69,39,515	0 0	1,09,71,820	0 0	54,12,530	0 0	6,72,65,465	0 0	15,12,620	0 0	2,48,27,410	0 0	9,81,000	0 0	1,68,69,460	0 0	20,47,79,820	0 0
" At Agencies	5,78,000	0 0	.....	.....	5,31,000	0 0	7,05,100	0 0	.....	.....	5,41,500	0 0	.....	.....	20,000	0 0	23,75,600	0 0
" In Remittance Transactions	3,15,59,236	12 0	1,26,05,210	0 0	2,00,84,950	0 0	3,83,68,000	0 0	58,65,000	0 0	7,30,405	0 0	13,85,000	0 0	51,58,400	0 0	11,56,76,201	12 0
" For Bullion delivered and for Premelting Fees	3,288	6 8	.....	.....	.....	.....	93,980	11 7	.....	.....	.....	.....	.....	.....	.....	.....	97,269	2 3
" To Small Coin Accounts	.....	.....	.....	.....	.....	.....	18,53,774	0 0	1,16,800	0 0	8,50,000	0 0	.....	.....	.....	.....	28,20,574	0 0
TOTAL ISSUES	10,90,80,040	2 8	2,35,77,030	0 0	2,59,48,480	0 0	10,82,86,319	11 7	74,94,420	0 0	2,69,49,315	0 0	23,66,000	0 0	2,20,47,860	0 0	32,57,49,454	14 3
Balance of Coin, 31st March 1889	1,46,98,211	7 8	80,06,660	0 0	84,52,055	0 0	2,77,77,389	1 3	29,11,150	0 0	1,61,25,785	0 0	6,01,405	0 0	45,69,625	0 0	8,30,82,271	8 11

No. VIII.

Value of Currency Notes in Circulation on the last day of each month. (In Lakhs of Rupees.)

	1862-63.	1863-64.	1864-65.	1865-66.	1866-67.	1867-68.	1868-69.	1869-70.	1870-71.	1871-72.	1872-73.	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.	1878-79.	1879-80.	1880-81.	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.
April .	4.10	5.13	5.68	7.48	7.02	7.84	8.92	9.80	9.65	10.13	13.34	11.01	9.27	10.75	10.73	11.13	13.30	11.27	12.89	12.86	14.20	13.35	2.34	13.02	13.78	14.02	16.54
May .	4.13	5.01	6.04	7.46	7.87	8.19	10.04	10.38	8.68	10.49	13.49	11.21	9.96	11.06	10.70	11.55	13.09	11.17	13.10	13.01	14.67	13.09	13.24	13.54	14.77	13.90	17.03
June .	4.21	5.09	5.99	8.34	8.60	8.53	10.04	10.80	8.70	10.83	13.51	11.83	10.16	11.29	11.59	12.67	13.87	11.82	13.64	13.72	14.91	13.01	13.83	14.86	13.78	14.08	17.69
July .	4.26	5.11	6.31	8.58	8.67	8.72	10.06	10.53	9.12	10.72	13.47	11.95	10.73	11.18	11.54	12.85	14.07	12.24	13.91	14.04	15.29	13.54	14.56	14.50	14.26	15.48	18.05
August .	4.28	5.16	6.37	8.69	8.48	9.39	10.13	10.21	9.45	11.29	13.22	12.05	10.87	11.19	11.91	12.15	14.27	12.74	13.75	14.22	15.29	13.79	14.97	14.36	14.44	15.66	17.69
September .	4.29	5.26	6.48	8.87	9.28	9.53	10.41	10.18	10.07	11.32	13.35	12.09	10.60	11.77	11.75	12.39	14.06	13.33	13.47	13.55	15.28	14.40	15.01	15.55	14.30	16.78	16.94
October .	4.58	5.63	7.09	7.84	10.16	9.96	10.61	10.76	10.19	11.31	13.00	12.06	10.88	12.04	11.45	13.19	13.70	13.58	13.55	13.39	15.82	14.49	13.61	15.71	14.53	17.78	16.74
November .	4.49	5.16	7.13	7.83	10.10	10.21	10.41	11.33	10.27	11.09	13.30	11.73	11.02	11.69	11.93	14.74	13.46	13.75	14.50	13.07	16.25	14.47	15.76	15.64	14.68	18.61	15.50
December .	4.52	5.11	7.48	7.40	9.96	10.32	10.30	11.31	10.35	10.87	12.88	10.91	11.08	11.22	11.97	15.05	12.69	13.80	14.38	13.15	16.16	13.39	15.08	15.20	14.41	17.69	15.15
January .	4.56	5.15	7.39	6.91	8.68	10.11	10.20	11.42	10.76	13.08	12.16	9.98	11.10	11.77	12.44	15.64	12.15	14.23	14.12	13.39	15.37	12.11	14.97	15.41	14.10	17.08	15.38
February .	4.71	5.08	7.40	6.87	8.87	9.56	10.68	10.82	10.07	12.69	11.52	9.69	11.13	11.98	12.57	14.07	12.20	13.28	13.25	13.74	14.42	12.26	14.53	14.56	14.07	16.45	14.83
March .	4.93	5.35	7.43	6.90	8.09	9.07	9.96	10.47	10.44	13.17	11.14	9.25	11.24	11.00	11.62	13.57	11.42	12.36	13.40	13.91	14.51	12.76	14.58	14.17	13.88	16.42	15.74
Average .	4.42	5.19	6.78	7.76	8.82	9.28	10.15	10.67	9.81	11.42	12.86	11.15	10.67	11.35	11.64	13.25	13.19	12.80	13.66	13.50	15.18	13.38	14.54	14.71	14.20	16.16	16.43
Net Imports of Silver .	12.35	12.80	10.08	18.67	6.96	5.53	8.60	7.32	94	6.52	71	2.49	4.64	1.55	7.20	14.68	3.97	7.87	3.89	5.38	7.51	6.25	7.44	11.48	7.04	9.30	9.28
Net Amount borrowed in India .	...	-34	-2	-99	60	79	-35	2.18	1.22	-1.16	-1.51	-4	3.43	2.92	-85	3.03	3.88	4.03	3.09	2.79	2.04	2.50	...	...	1.20	5.50	2.79
Currency Investment on 31st March .	67	2.49	3.57	3.98	3.25	3.25	3.91	3.60	3.23	5.91	5.69	5.69	5.69	69	6.00	5.69	6.00	6.00	6.00	6.00	6.00	6.00	6.00	5.99	5.99	5.99	5.98
Profits of Paper Currency Department .	-4	...	13	8	7	10	7	14	12	11	21	19	20	20	21	20	19	25	23	22	21	21	22	20	21	21	21